DOCUMENT RESUME

ED 028 375 AC 004 193

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A Comparative Study of Lecture and Discussion Methods. Studies in Adult Group Learning in the Liberal Arts.

Fund for Adult Education, White Plains, N.Y.
Pub Date 60
Note-159p.
Available from-Library of Continuing Education, 107 Roney Lane, Syracuse, N.Y. 13210 ($.35)
EDRS Price MF-$0.75 HC-$8.05
Descriptors-Attendance Patterns, Bibliographies, Changing Attitudes, Citizen Participation, *Comparative Analysis, Democratic Values, *General Education, *Group Discussion, Knowledge Level, Laymen, *Lecture, Participant Characteristics, Participant Satisfaction, Questionnaires, Skill Development, Specialists, Statistical Data

Effectiveness of discussion methods directed by lay leaders was compared with effectiveness of the lecture method used by professional subject matter specialists in the liberal arts program, The Ways of Mankind, given by the University Extension of the University of California at Los Angeles. Effectiveness was defined in terms of the degree to which objectives of liberal adult education were achieved: development of mental abilities or skills; changes in values, interests, or attitudes; and increased knowledge. Data were collected from the twelve discussion groups composed of 22 to 28 members, and lectures with 25 to 233 members, by pre and post questionnaires and semi-structured interviewed, and by direct observation. General conclusions were that the same kinds of people were attracted by both methods: equal satisfaction was expressed with both presentations; and with certain exceptions, both methods had the same effect on participants. Participants were professionals, highly educated, economically established, between 30 and 45 years of age, married, liberal, and over-represented by women and the Jewish religion. Attendance declined throughout the programs, but was accepted as normal for this type of educational program. The appendix includes measurement instruments, bibliography, review of research, and statistical data. (pt)

STUDIES IN
Adult
Group
Learning
in the
Liberal Arts

FAE

PROGRAMS
PARTICIPANTS
EFFECTS

A Comparative Study of Lecture and Discussion Methods

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Richard J. Hill

THE
FUND
FOR
ADULT EDUCATION

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Library of Congress Catalog Card No. 60-16561

Preface

BY

C. SCOTT FLETCHER
PRESIDENT
THE FUND FOR
ADULT EDUCATION

This book represents one of four "Studies in Adult Group Learning in the Liberal Arts" being published in 1960 by The Fund for Adult Education. The first one was an analytical history of the study-discussion programs developed by the Fund's Experimental Discussion Project: *Accent on Learning,* by the Director of the Project, Dr. Glen Burch. The other three are research studies, resulting from independent investigations conducted by highly competent research groups in the social sciences. Together they represent the first serious attempt to apply the methods of social science research to the evaluation of adult education programs: in this case, programs of reading and discussion in small groups led by non-professional students of the subject matter rather than by experts in it.

Established in 1951 by The Ford Foundation, the Fund was assigned a concern with "that part of the educational process which begins when formal schooling is finished." The Fund's Board of Directors defined their purpose as that of "supporting programs of liberal adult education which will contribute to the development of mature, wise, and responsible citizens

who can participate intelligently in a free society." To these ends, the Fund has laid particular emphasis upon study-discussion programs in the liberal arts. It has done so not only through its own Project, but also by giving substantial financial assistance to universities, liberal arts centers, and national organizations which sponsored and promoted such programs, developed program materials, and trained leaders.

In 1959-60, the Great Books Foundation enrolled 50,000 participants in 2,700 groups in more than a thousand communities, in the United States and abroad. The American Foundation for Continuing Education had more than 10,000 group participants in nearly five hundred communities. Universities, colleges, public libraries, public evening schools, and a host of local social and civic agencies and educational groups, including private persons and their friends, have organized and sponsored the group study of these materials. In 1959, more than 15,000 men and women were engaged in the study and discussion programs brought into being by the Fund. While these were, for an experimental period, confined to ten "Test Centers" (mentioned in Burch's study, and described more fully in the Fund's biennial Report for 1955-57 and in a document to be issued later this year), by 1958 a rapidly growing list of other educational organizations, national and local, and of private groups, were using these programs. At the present time, twelve of the programs are being published or prepared for publication by commercial publishers; and the audio-visual components of the programs are being distributed by the Audio-Visual Center at the University of Indiana.

With the spread of study-discussion programs in the liberal arts came recognition of the need for careful study of the values and the effects of this method for the people who took part. As more colleges and universities moved to set up programs of this type, concern was felt by many faculty members over the maintenance of high educational standards, particularly where the group leadership was in the hands of those who were not professional educators. The Fund, therefore, as early as 1955, began a series of research grants for studies of the participants, the leaders, and the educational effectiveness of study-discussion programs, the studies being made by independent investigators not themselves connected with the program. Three major studies were made between 1955 and 1959.

The first study, made in 1956 by members of the faculties of the University of California at Los Angeles, the California Institute of Technology, and Whittier College, was directed by Abbott Kaplan, then Assistant Director of Extension at UCLA. The field of the studies consisted of 118 liberal arts groups, in four content areas: *World Affairs, World*

Politics, Ways of Mankind, and *Introduction to the Humanities.* The specific sample included 150 individuals who were members of groups in Los Angeles, Pasadena, and Whittier, and fifty of the group leaders: the method was based on 325 interviews, before, during, and after the ten-week program, and observation of 52 group sessions.

The second study was made in 1957 by the National Opinion Research Center of Chicago, using some 1900 participants in 172 *Great Books* groups, ranging from first-year to fifth-year status within that program. Interviewers visited the groups and administered detailed questionnaires; and the responses were coded on IBM cards and subjected to elaborate statistical analysis. The director of this study was Dr. James A. Davis.

The third major study, in 1958, was designed to compare learning effects of the same content, *Ways of Mankind,* with two methods: university lecture and lay-led group discussion. The sample studied consisted of three lecture classes, enrolling 283 adults, and twelve discussion groups with 293 participants, all within the liberal arts program of UCLA. Again, use was made of questionnaires, interviews, and direct observation. The director of this study was Dr. Richard J. Hill,* Department of Anthropology and Sociology, UCLA.

The publication of these studies, which were separately conceived and independently carried out, is not intended as a plea for one method over others. It is intended as a contribution to the discussion, among educators and interested adult students, of the appropriate place and use and purpose of one of the many methods of learning that appeal to men and women, and as an aid to educators and administrators in their choices of program methods and student "publics". Here, for the first time, are presented – though in admittedly preliminary form – responsible research data and statistical interpretation on adults in liberal arts programs. The studies themselves make it clear that the reading-discussion method attracts a particular kind of audience, and that the larger population from which it is drawn has many other tastes and proclivities. The question, therefore, is not, "Which method is best?" but, "What is the best type of program and method for given sorts of people, and what ends are best served by which educational means?"

If this broader question were studied for many types of education and many kinds of educational publics, our skill and effectiveness in adult education would be immeasurably advanced. It is to this greatly needed research effort that we hope to contribute by offering these studies to the public.

*Dr. Hill is now with the Department of Sociology, University of Texas.

ACKNOWLEDGMENTS

The research reported in the following pages is the product of the talents and energies of a large number of individuals. I should like to take this opportunity to express my sincere appreciation for the cooperation and encouragement we have received from Mr. G. H. Griffiths, Vice-President of The Fund for Adult Education. The advice and criticisms of Professor Carl I. Hovland of Yale University were of great assistance, as were those given us by Dr. Charles R. Wright of the University of California, Los Angeles.

The project increased considerably the burdens of the staff of University Extension, University of California, Los Angeles. The study could not have been executed without the cooperation, administrative skill, and great patience of Dr. Elwin V. Svenson, Dr. Leonard Freedman, Mr. Leonard Klein and their associates. We also owe a special debt to Mrs. Lillian Lipsy, Mrs. Rosalind Loring, and Mrs. Sarabel Danowski, all of University Extension, for the unusual cooperation and efficiency with which they responded to the various peculiar and tiresome requests that were made by the research director.

For the most part, the data were processed at the Western Data Processing Center, University of California, Los Angeles. Thanks are due to a number of those on the Center's staff for their aid and instruction.

The author was directly assisted by Miss Janet Kreuter, Mr. David C. Dietrick, Mr. Nason E. Hall and Mr. Gerald M. Platt. Not only did these four perform much of the tedious work that is associated with a project of this variety, but they also made a genuine contribution to the analytical and interpretative framework that was employed. Finally, the author wishes to express his gratitude to Miss Mildred Earnshaw who typed the final manuscript.

Richard J. Hill
Los Angeles, California
September 20, 1959

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Chapter One

INTRODUCTION

INTRODUCTION

There continues to be considerable discussion by American educators as to what teaching methods are most effective in attaining educational objectives. Given the diverse and diffuse nature of American education, it is not surprising that unanimity of opinion does not characterize these discussions. Further, given the high value that Americans place on education, it is not surprising to find an element of irrationality in many of the debates. If the educator is a dedicated member of one of the current group-oriented, participation-centered schools of thought, he has no problem; the issues are decided as a matter of belief and doctrine. Similarly, if the educator is convinced of the absolute superiority of time-honored, authority-centered methods, he, too, has no problems; again the decisions are made without concern about the particular characteristics of a given educational situation. On the other hand, if the educator makes the assumption that no single method is superior to all others in every educational situation, he finds himself in a much more difficult position; he must make a decision on more or less rational grounds after having considered the multitude of factors involved.

The educator who is willing to give rational consideration to alternative teaching methods must take cognizance of the objectives of his program, the characteristics of the student population, the availability and nature of the teaching staff, financial resources, and so on. Once the nature of such factors has been determined, the educator might then turn to the research literature and ask, "Given these conditions, which of the available teaching methods is best suited to my situation?" But when the educator seeks help from this research literature, he fails to find a (totally) adequate answer. In terms of research results, the literature is characterized more by variation than by consensus. Further, the number of methodologically adequate studies is not large.[1] If our educator happens to be involved in planning adult education programs, he will find the pertinent research literature sparse indeed. The educational administrator, especially in the area of adult education, does not have a sufficiently well-developed body of research findings to permit him to reach objectively based decisions regarding teaching methods.

This lack of an integrated body of research findings is not limited to issues of teaching methodology; the condition appears to be relatively general within educational research. The deficiency seems particularly gross in the area of adult education.[2] Recently, a number of efforts have been directed at improving and further organizing our general knowledge about adult education programs. The Office of Education has issued a bulletin entitled *Participation in Adult Education* which provides considerable information on the general characteristics of participants in such programs.[3] The National Opinion Research Center surveyed a national sample of Great Books Program discussion groups in order to assess the effects of participation in that program.[4] *An Overview of Adult Education Research* has been completed by the Bureau of Applied Social Research, Columbia University.[5] Dr. Abbott Kaplan has completed his investigation of discussion groups in the Los Angeles area.[6] All of these investigations were made possible through the support and interest of The Fund for Adult Education. This series of studies can be viewed both as an effort to provide a more adequate basis of objective information for those involved in planning and administering adult education programs, and as a guide for those pursuing research in this general educational area.

The present study can be placed in the context of this larger research effort. *The Ways of Mankind* Study was addressed to the same general purpose; however, it contained certain important differences. This investigation was directed at the specific problem of evaluating alternative methods of course presentation and conduct. The fundamental problem was that of comparing discussion groups with lecture classes. Comparative analysis requires a research design that differs from that necessitated by the more general evaluative surveys made by Davis and Kaplan.[7] Nevertheless, the

various studies did converge on a number of similar issues. Where this was the case, some attempt was made to integrate the findings of the several investigations.

The Research Problem

Adult education programs make extensive use of discussion methods in providing educational experiences in a variety of subject matter areas. In addition, a number of these programs employ discussion leaders who are not formally trained in the subject matter around which the discussions center. While these lay leaders frequently have some training in discussion group procedures, they cannot be considered either formally trained teachers or specialists in discussion group methods. The major purpose of the following study is to assess the relative effectiveness of discussion methods, as directed by lay discussion leaders, when compared with the lecture methods employed by professional, subject-matter specialists. In making this assessment, lecture and discussion methods will be compared in terms of the objectives of liberal adult education.

The Objectives of Adult Education in the Liberal Arts

In making a comparative evaluation of two educational methods or procedures, decisions must be made concerning the criteria to be employed in judging effectiveness. In problems like the present one, the dimensions or factors to be used in comparing alternative methods should be derived from a consideration of a program's purposes. For liberal arts programs in adult education, one partial list of objectives or purposes is available. At a recent conference of adult educators, the following objectives were endorsed by the majority of the delegates:

1. "Ability to examine personal and social attitudes and values."
2. "Appreciation of intellectual activity."
3. "Interest in new areas of intellectual activity."
4. "Critical inquiry and analysis."
5. "Ability to make judgments, informed and independent, on an intelligent basis."
6. "Increased facility in seeing connections and interrelationships."
7. "Pleasure and satisfaction resulting from participation in educational programs."
8. "Sympathy with divergent points of view."
9. "Acquisition of knowledge of the great problems of man."[8]

Preliminary analysis of these nine objectives suggested that they can be roughly subsumed under three more general classes of behavioral development or change:

1. Development of mental abilities or skills (Objectives 1, 4, 5, and 6).
2. Changes in values, interests or attitudes (Objectives 2, 3, 7, and 8).
3. Increased knowledge (Objective 9).

The problem adressed by the present research is not that of determining whether any such changes do occur as a consequence of participation in adult educational programs. It is assumed that some, if not all, of these objectives are achieved to some degree. The problem central to this study is that of answering the question, "What is the relative effectiveness of lay-led discussion methods as compared with professionally-led lecture methods in achieving the objectives of liberal adult education?"

The Research Setting

In 1953, the Extension Division of the University of California at Los Angeles instituted a series of liberal adult education discussion groups. With the assistance of The Fund for Adult Education, this program was expanded in 1955. Under the direction of its Department of Liberal Arts, the Extension Division currently offers discussion series in a variety of subject-matter areas. Because of the extensive number of participants and the variety of methods employed and of subject-matter fields covered, this particular program seemed uniquely suited for research of the type that was proposed.[9]

The selection of an on-going, vital educational program for research provides a number of advantages to the researcher. He is not burdened with the problems of teacher selection, course development, student recruitment, and other administrative procedures. On the other hand, the situation also imposes certain limitations on the type of research that can be pursued. In the present instance, the research had to be formulated within the realistic limits of the existing programs. Requests for special experimental controls were kept at the level of necessity rather than extended to the level of ideal desirability. Further, the research had to be administered in such a way as to minimize the "measurement effect" if the findings were to have meaningful generality.

Even with the desire to conduct the research in as "normal" a situation as possible, the administrators of the program found it necessary to engage in certain special efforts in order to provide the conditions required by the investigation. For example, in order to recruit the student population specified by the research design, the program selected for study was given special publicity. Special registration procedures were developed, and special controls instituted in order to insure that the various groups and classes were of the size required by the research design. Without such cooperation from the administrative staff of the program, the research would not have been possible.

In general terms, the execution of the research design required a large population of students, enrolled in an established course within an established adult education program. In an effort to overcome some of the difficulties involved in the evaluation of the educational process, the decision was made to control certain factors that are normally operative in any general educational program. First, it was decided to control "subject matter" by restricting the investigation to a single subject-matter area. The first problem, then, was that of selecting one series from the various courses available. This selection was made on the basis of the following criteria:

1. The course had to be one that was normally included in the University of California, University Extension, Liberal Arts Adult Education Program.
2. The course had to be one which was considered to be a successful and established part of the Liberal Arts Program.
3. The subject matter of the course had to be such that it could be treated by both discussion and lecture methods.
4. The course had to have sufficiently broad appeal to insure a high probability of having a minimum of 350 adults enrolled at the beginning of the period of investigation.

On the basis of these criteria, *The Ways of Mankind,* a general introduction to anthropology, was selected.

The selection of lecturers was also subject to control. Competence in the subject-matter area was a necessary but not a sufficient prerequisite. On the basis of informally gathered information, the selected lecturers were considered to be good classroom teachers; they were experienced members of a university faculty; they were popular with students; and when approached, each evidenced some interest in the research project. By contrast, the researchers exercised no control over the selection of discussion group leaders; these leaders were selected by normal University Extension procedures. The discussion leaders did receive some training both in methods of leading discussions and in the subject matter of the series, i.e., anthropology.[10] None of the discussion leaders was a trained anthropologist, but all had been participants in the Ways of Mankind program, and some had led previous groups.

The Ways of Mankind Series

The Ways of Mankind discussion program evolved from an educational radio project initiated in 1951 by the National Association of Educational Broadcasters. A group of professional writers under the general supervision of an anthropologist, Dr. Walter Goldschmidt, prepared a series of 13 radio broadcasts dramatizing structural and functional aspects of human societies:

language, culture, family, education, technology, status and role, ethics and values, authority, etc.

> The radio series was immensely successful, and in the spring of 1953 The Fund for Adult Education's experimental discussion project collaborated with the Community Education Project in San Bernardino, California, in a venture involving the use of selected programs in the series in an experimental radio discussion program. Materials developed in connection with this program were revised in 1954 and used, together with long-play recordings of the radio programs as adapted for discussion purposes, in a study-discussion program for the Fund's experimental discussion project. This proved to be one of the most successful programs sponsored by the project, and has been used by scores of adult groups in all parts of the country.[11]

In 1957, Dr. Goldschmidt edited a two-volume set of *Readings in the Ways of Mankind* ". . . which make possible more intensive and extensive study"[12] of anthropological literature. These readings, along with selected recordings of the original radio dramatizations, continue to be used in conjunction with the discussion series.

The Ways of Mankind, when conducted as a discussion program, consists of eleven two-hour sessions, each one being focused on a particular subject by the presentation of a half-hour recording. The readings are divided into sections which are organized around the problems dramatized in the recordings. Participants are expected to read this material prior to the meeting of the discussion group. The usual procedure is for the playing of the record to precede any discussion. The leader then opens the discussion by reference to the recording or to the reading material. A carefully prepared Discussion Guide is available for the leader's use.

In adapting the program to lecture presentation, additional decisions were necessary. In order to control for any special effects of the recordings and the readings, it was decided to utilize these aids in both the lecture and the discussion treatments of the subject matter. Thus, both the lecture and discussion presentations examined in the present research involved eleven two-hour sessions, each of which incorporated a half-hour recording, and participants in both were provided with the same set of readings.

Summary

The major purpose of the present study is to assess the relative effectiveness of discussion group methods, directed by non-professional leaders, as compared with lecture methods employed by professional subject-matter specialists. For the purposes of this research, effectiveness is defined in terms of the degree to which the objectives of liberal adult education are achieved.

From a consideration of one list of objectives, it was decided to compare the two educational methods with respect to three general areas:

1. The development of mental abilities or skills.
2. Changes in values, interests or attitudes.
3. Increased knowledge.

The particular course selected for investigation was an introductory course in anthropology, The Ways of Mankind. This course is a normal part of the curriculum of the Liberal Arts Adult Education Program of University Extension at the University of California, Los Angeles. The Ways of Mankind program is considered to be a successful and established part of the Liberal Arts Program, and deals with an area that can be treated by both discussion and lecture methods. As usually conducted, the discussion series incorporates dramatic recordings and a two-volume set of "readings" selected from the professional literature. The use of both the recordings and the readings was maintained in the classes studied by the present investigation.

Footnotes

[1]See Appendix I of this report for a review of the pertinent literature. Also see E. deS. Brunner, D. E. Wilder, C. Kirchner, and J. S. Newberry, Jr., *An Overview of Adult Education Research.* Chicago: Adult Education Association of the USA, 1959.

[2]Brunner, *et al., op. cit.*

[3]*Participation in Adult Education.* U. S. Department of Health, Education, and Welfare; Office of Education. Circular No. 539. Washington: United States Government Printing Office, 1959.

[4]Davis, James A., and associates, *A Study of Participants in the Great Books Program.* (Studies in Adult Group Learning in the Liberal Arts, no. 3.) White Plains: The Fund for Adult Education, 1960.

[5]Brunner, *et al., op. cit.*

[6]Kaplan, Abbott, *Study-Discussion in the Liberal Arts.* (Studies in Adult Group Learning in the Liberal Arts, no. 2.) White Plains: The Fund for Adult Education, 1960.

[7]Davis, *op. cit.* and Kaplan, *op. cit.*

[8]Center for the Study of Liberal Education for Adults: Princeton Conference on Objectives of Liberal Adult Education, April 11-13, 1958.

[9]In the Los Angeles area, during the academic year of 1957-1958, approximately 4,200 adults were enrolled in approximately 200 discussion groups dealing with 10 different topics.

[10]Such training procedures are a normal part of the University Extension's program.

[11]Goldschmidt, Walter. "Foreword," *Readings in the Ways of Mankind.* White Plains, N. Y.: The Fund for Adult Education, 1957.

[12]*Ibid.*

Chapter Two

THE RESEARCH DESIGN

THE RESEARCH DESIGN

The problem addressed by this research project has been described in Chapter I. Stating the problem in general terms does provide a framework within which the outlines of research can be formulated; however, a more detailed analysis is necessary prior to making the specific decisions required in the actual execution of a project.

Within the framework established by the general statement of the problem, the research effort was directed by four major goals. First, as a minimum requirement, this project was designed to provide a reliable description of the relative efficacy of the lecture and discussion methods employed in the Ways of Mankind Series. Second, where p ssible, the project sought to subject to further test certain generalizations and hypotheses derived from previous research in this area. Third, the project was designed to explore particular problems in an effort to provide a basis for additional research activity. Finally, a variety of research techniques were employed in an exploratory effort to evaluate the applicability of these techniques in this type

of research situation. Thus, on the one hand, the present research is most appropriately viewed as a "pilot study." On the other hand, the project sought to provide reliable information with respect to certain issues currently being faced by those in adult education.

The Research Design

The basic research design stipulated certain minimal population requirements in order to insure an adequate basis for the proposed analysis. The design required a minimum study population of 350; 200 enrolled in discussion groups and 150 enrolled in lecture classes. The average size of the discussion groups was specified as being neither greater than 25 nor less than 20 persons. Given this latter specification, and the fact that most teachers feel that their effectiveness is influenced by the size of their classes, the size of two lecture classes was limited to a maximum of 25 students. However, many lecturers, when they have relatively small classes, use a type of lecture-discussion method, allowing students to raise points and direct class procedure to some degree. In order to provide a situation in which there was little or no opportunity for student participation, the minimum size of a third lecture group was set at 100 students. The basic design, then, called for (1) at least 10 discussion groups, each having at least 20 members; (2) two small lecture classes having a maximum enrollment of 25 students in each; and (3) one large lecture class having a minimum of 100 students.

The actual number of enrollments exceeded the minimum design requirements. Twelve discussion groups were formed, ranging in size from 22 to 28 members, the median size being 24. The actual enrollment in the large lecture group was 233 students, while both small lecture classes had the specified 25 students.

In addition to the above specifications, the following design requirements were imposed:

1. The general subject matter was to be the same for both the discussion groups and the lecture classes.
2. The subject matter was to be treated in eleven two-hour sessions.
3. Each meeting of all 15 groups or classes was to incorporate a half-hour dramatic recording.
4. The same reading material was to be used by all participants.

Methods Used in the Collection of Data

Within the above framework, the basic design called for measurements at the beginning of the series, during the course of the eleven weeks, and toward the end of the series.

Three methods were employed in collecting information from the study population: questionnaire, interview, and direct observation. Two ques-

tionnaires were administered: one at the first meeting of the series (pre-questionnaire) and one at the tenth meeting (post-questionnaire). The first questionnaire required approximately one hour to complete, while the second was completed in approximately 50 minutes. The pre-questionnaire provided data on the expectations of the participants, selected attitudes,[1] knowledge of anthropological concepts, previous experience in adult education, and socio-economic characteristics. The post-questionnaire included measures of attitudes, judged effects of the program, evaluations of various aspects of the program, and knowledge of anthropological concepts. Of the 576 persons enrolled in the program, completed pre-questionnaires were obtained from 484 (75 of those enrolled were absent, and 17 refused to complete the questionnaire). Post-questionnaires were completed by 288 persons (276 of those originally enrolled were absent from the tenth meeting of the series, and 12 persons refused to complete the post-questionnaire).[2]

The second major source of data consisted of two "waves" of semi-structured interviews. The first interview, which averaged one hour and 15 minutes in length, was focused on the subject's motivation for participation in the series, his past experience in discussion groups, the degree to which he participated in the activities of his community, his organizational affiliations and activities, his reading and recreational activities, and his evaluation of his role in informal group situations. During the first two weeks of the program, interviews were completed with a sample of approximately 20 per cent of the enrolled population.[3]

A second wave of interviews, completed following the conclusion of the program, concentrated on the effects of participation and on the participant's evaluation of the program. The basic post-interview sample was similar to that selected for interviews during the opening weeks of the program. In addition, the post-sample was expanded to include a large representation of members from two specific discussion groups, one of which was successful in maintaining a high level of attendance, and one in which attendance declined to less than 25 per cent of the original group. The second interview sample, then, consisted of 140 persons with interviews being completed in 136 instances.

Finally, data were gathered through the direct observation of both the lecture and discussion groups. Trained observers attended each meeting of the 15 groups and systematically noted attendance, participation, topics discussed, and particular elements of leader (or lecturer) behavior. Each of the 165 meeting-observations also contains the observer's over-all evaluation of the meeting, a judgment as to the degree of interest evidenced by the participants, a description of the general manner in which the leader or lecturer conducted the session; and, for the discussion groups, a judgment as to whether or not informal leaders were emerging.

Specific Problems Addressed

In the following discussion of specific problem areas, the attempt will be made to present some of the thinking that preceded the execution of the research. In some instances, it was possible to derive testable hypotheses from the social-psychological and educational research literature. In other places, hypotheses were developed through the conceptual analysis of the general research problem. In this case, while guided by previous research, the reasoning was largely speculative. Finally, in certain areas, the research task was defined as one of empirical description. For the most part, these were areas that have not been extensively investigated; areas in which there are no sound theoretical or empirical grounds on which to base testable hypotheses.

In the following pages, the discussion of "selective factors" illustrates a problem area that was attacked largely at the level of descriptive analysis. In the areas of "acquisition of information" and "changes in attitude," it was possible to derive hypotheses from the existing literature. Finally, in the areas of "expectations regarding the program" and "behavioral change," speculation, based in part on specific findings of earlier studies, gave rise to certain testable propositions. In the discussion of behavioral change, the opportunity is taken to show how a general hypothesis can be "translated" into a set of sub-hypotheses which can be tested directly. It should be remembered that the hypotheses that are stated in the following pages are but examples of those which we set out to examine. Others will be introduced at appropriate places in the remainder of the report.

I. *Selective Factors*

Previous investigations of adult education programs have found that participants differ in certain respects from the general population.[4] It has been demonstrated that non-credit, liberal arts, adult education programs have a greater appeal for certain segments of the public than they do for others. For example, persons in professional occupations, with college educations, and between the ages of 30 and 45 are over-represented among the participants in adult education discussion programs.

There was, then, no reason to expect that the participants in the Ways of Mankind Series would be representative of the population of the Los Angeles area. On the basis of earlier investigations, it was expected that the participants would be highly educated, professionally employed, and in the middle age groups. Also, on the basis of these studies, it was expected that a larger proportion of females than males would enroll in the program.

While the available literature does provide information about the selective factors operative in liberal arts adult education in general, there is little information that bears directly on the factors related to the selection of

discussion methods in preference to lecture presentation. With certain exceptions, to be illustrated below, the research task here is largely a descriptive one. This research should provide an empirical answer to the following question: "When adults are given a choice of discussion or lecture presentations of the same subject matter, what factors are related to their selection of one in preference to the other?"

With respect to the problem of the selective factors leading to the preference of discussion over lecture methods, a few hypotheses can be inferred from the existing body of knowledge. For example, Kaplan found one significant difference between college graduates and those with less than a college education in terms of their reasons for enrolling in discussion programs. The opportunity to exchange views and enter into discussion was cited more often as a reason for enrolling by college graduates than it was by those with less than a college degree. Kaplan interprets this finding as follows:

> It may be conjectured that those with higher education were more interested in the discussion aspect because for them this was the unique aspect of the program. Having had considerable formal education, had they been primarily interested in factual information, they would have taken one of the more traditional extension or adult courses or, as some actually stated, read by themselves.[5]

This interpretation suggested the following hypothesis:

1. Participants who enroll in discussion groups will have had more formal education than participants who enroll in lecture classes.

II. *Acquisition of Information*

There are a number of creditable studies available which compare lecture and discussion methods in terms of the amount of information acquired by students in the two situations.[6] The majority of these studies have found that the methods are equally effective in this regard. Where significant differences have been found, they tend to be in a direction indicating the superiority of the lecture method. The direct applicability of such research to the present situation is limited by two considerations. First, the majority of this literature is concerned with regularly enrolled college or high school students. Secondly, these students were involved in obtaining "grades" and "credit." In the present study, of course, we are dealing with adults in a non-credit series. Despite these limitations, the research literature provided a basis for generating two alternative hypotheses:

2. A. No difference will be observed between lecture and discussion participants in terms of the amount of information acquired during the course of the program.

B. During the course of the program, participants in lecture classes will acquire more information than is acquired by participants in the discussion series.

III. *Change in Attitude*

The problem of comparing lecture and discussion methods in terms of effecting attitude change has not been extensively investigated. It has been demonstrated that both methods are capable of altering attitudes in certain circumstances, but in only a limited number of instances have the two methods been directly compared in these terms. Where such comparisons have been made, discussion methods usually have been found to be superior to lecture methods. Such findings gave rise to the following hypothesis:

3. A. As a result of participating in the series, discussion group members will evidence greater attitudinal change than members of lecture classes.

With respect to the attitude changes that might be expected to occur as a result of participation in the series, certain characteristics of the population must be considered. It was assumed that the participants in the Ways of Mankind Series would be similar to those enrolled in other liberal arts programs. For example, we expected the participants to be mature, well-educated individuals. It is likely that their attitudes toward such social issues as minority group relations (ethnocentrism) are based on considerable experience and information. Such attitudes are resistant to change. An eleven-week series in which one's participation is voluntary may have some influence on these attitudes; however, one would hardly expect a drastic revision in attitudinal position. Furthermore, the participants do not experience the program *in vacuo;* 22 hours is a small portion of the totality of eleven weeks of life. If attitudes are derived from social contacts and experience, and if these social conditions remain constant during the eleven weeks of the program, then the participant's milieu may be assumed to be a conservative force operating to maintain his original attitudinal position. On the bases of these considerations, an alternative to hypothesis 3 A was stated.

B. During the course of the program, no change in the attitudes of the participants will be observed, regardless of whether these participants are members of a discussion group or members of a lecture class.

Reasoning from still different grounds, a third alternative hypothesis can be developed with respect to attitude change. Other things being equal, it might be assumed that the more directly related an experience to a given attitude, the greater the effect of that experience on that attitude. If this assumed relationship is general, participation in the program should have

a greater effect on some attitudes than on others. For example, the "democracy" scale developed by Riecken, measures an individual's attitude toward democratic group processes. The majority of the items in this scale refer to processes necessarily involved in a discussion group experience. The following hypothesis was suggested by this analysis:

4. Discussion group members will evidence greater change on the Riecken democracy scale than will lecture participants.

Additional hypotheses concerning attitude change have been derived from research directed at determining the influence of social pressure on individual attitudinal position. Generally, social pressure operates to reduce the attitudinal heterogeneity of group members. In the present instance, it was postulated that social pressure will operate to a greater degree in the discussion groups than in the lecture classes. The literature also suggests that the effectiveness of social pressure in reducing attitudinal heterogeneity will vary inversely with group size. On the basis of these assumptions, the following hypotheses were forwarded:

5. For groups of the same size, the tendency toward attitudinal homogeneity will be greater in discussion groups than in lecture classes.
6. The tendency toward attitudinal homogeneity will be greater in the small lecture classes than in the large lecture class.
7. As a consequence of social pressure, the more the individual's attitude differs from the norm of his group, the greater the likelihood that the individual will leave the group.
8. The relationship specified in 7 will be more pronounced in discussion groups than in lecture groups.

IV. *Expectations Regarding the Program*

In his study of discussion groups in the Los Angeles area, Kaplan reports that 21.2 per cent of his sample enrolled in the program because of the "social attraction" of the group.[7] These persons joined discussion groups to "meet people" or to share an intellectual experience with friends. Davis reports that 24 per cent of his sample joined Great Books discussion groups with the expectation of "making new friends."[8] In both instances, the participants placed more importance on other expectations; however, the social motivation for enrolling cannot be minimized. In the present instance, for participants who are socially motivated, certain features of the discussion group would appear to make such an experience more attractive than the lecture situation. It was assumed that the participants viewed discussion groups as being more informal than lecture classes. By definition, participation in a discussion necessitates social interaction among the members, while in the lecture situation, the interaction is focused on the instructor and

active participation by the students is not required. In addition, the lecture classes were held in the classrooms of a university, while many of the discussion groups met in private homes. If one enrolled in a program "to meet friends," it seems reasonable that he would prefer the informal atmosphere of a discussion in a private home to the traditionally formal setting of a lecture delivered in a university classroom. On the basis of this line of reasoning the following hypothesis was formulated:

9. Discussion participants will differ from lecture participants in terms of their respective patterns of expectations concerning the program. Participants who seek to make new friends or to improve their conversational ability will prefer discussion group membership to membership in a lecture class.

With respect to the expectations of participants, an additional hypothesis was derived from a consideration of the features usually associated with lecture presentation. In the "ideal" lecture situation, an authority presents the subject matter of his field in a structured or organized fashion. His presentation is not interrupted by digressions resulting from the particularistic interests of his audience. He has the opportunity to make complete use of the available time to convey his material; he does not have to consider what others, the students, in the situation "think." Such considerations led to the following hypothesis:

10. Participants who enroll because of their intellectual interest in the subject matter or because they seek to "fill gaps" in their education will prefer the lecture situation to membership in a discussion group.

Stating the above two hypotheses in more general terms led to the following:

11. Participants who are motivated by social considerations will prefer discussion groups to lecture classes: those motivated by traditional, intellectual interests will prefer the lecture situation.

V. *Behavioral Change*

The research findings with respect to behavioral change are compatible with those pertaining to attitudinal change. In the small number of instances where lecture and discussion groups have been compared with respect to behavioral change, greater changes are usually observed among members of the discussion groups. On the other hand, it is reasonable to assume that the behavior patterns of well-educated, mature individuals are resistant to change. Thus, as was the case in the discussion of attitudinal change, two alternative hypotheses were suggested.

12. A. As a result of participating in the series, discussion group mem-

bers will evidence greater behavioral change than is evidenced by members of lecture classes.

B. During the course of the program, no change in the behavior patterns of the participants will be observed, regardless of whether these participants are members of a discussion group or members of a lecture class.

A number of relatively specific hypotheses were developed with respect to the consequences of participation for social relations and community involvement. We have assumed that the discussion situation is characterized by greater "informality" than is the lecture situation. We have hypothesized that discussion participants will place greater emphasis on the social aspects of the program than will lecture participants. If the assumption is correct, and if the hypothesis is empirically supported, certain consequences should follow. People who are motivated to "make friends" and who are placed in an informal situation should in fact establish more new friendships than persons who are in a formal situation and who are not as highly motivated by social considerations. This expectation was stated in the form of a hypothesis.

13. Participants in discussion groups will establish more new friendships during the course of the program than will lecture participants.

The same line of thought, plus consideration of the fact that the meeting places of many of the discussion groups were located in the participants' communities or neighborhoods, gave rise to another hypothesis.

14. Membership in a discussion group will have greater consequences for community involvement than participation in lecture classes.

One of Kaplan's findings is of special interest with respect to community involvement. Kaplan states that, "Among those who joined for social reasons, some indicated they were new in the community and hoped to meet congenial people."[9] For individuals with intellectual interests, who are relatively new to a community, a community-centered discussion group may well appear to be an ideal mechanism for developing desired patterns of involvement in the community. If such analysis is correct for a significant number of discussion group participants, the following hypothesis should be verified:

15. At the beginning of the program, members of discussion groups will be less "involved" in the activities of their communities than will members of lecture classes.

As an example of the specific hypotheses that have been derived from many of the previously stated hypotheses, the following list of sub-hypotheses have been developed from hypothesis 15. These sub-hypotheses specify in

operational terms the manner in which we expected difference in community involvement to be reflected in the data.

15. A. At the beginning of the program, discussion group members will have resided in their communities for a shorter period of time than lecture participants.
    B. At the beginning of the program, discussion group members will have fewer good friends residing in their communities than will lecture participants.
    C. At the beginning of the program, discussion group members will engage in less visiting within their communities than will lecture participants.
    D. At the beginning of the program, discussion group members will be less aware of issues facing their communities than is the case for lecture participants.
    E. At the beginning of the program, discussion group members will be less involved in action pertaining to community issues than will lecture participants.
    F. At the beginning of the program, discussion group members will belong to fewer community-oriented organizations than will lecture participants.

If the data support these six sub-hypotheses, the more general hypothesis, 15, will be considered to be empirically verified.

Summary

The general problem outlined in Chapter I can be described in terms of four general questions. These questions guided the formulation of the project, the collection of data, and the analysis that was pursued.

1. What is the relative efficacy of the lecture and discussion methods employed?
2. Which of the hypotheses and generalizations derived from previous research, or developed from speculation about the research problem, hold for this type of educational situation?
3. Where is additional research required?
4. What methodological problems are encountered in this type of research situation?

In order to provide at least partial answers to the above questions, a number of specifications were incorporated into the research design. For example, the design required a minimum study population of 350 persons. In all instances, the design specifications were achieved.

Prior to the execution of the research, considerable effort was devoted to developing a number of hypotheses that might be examined in connection

with the project. Here the attempt was made to relate the present research to existing knowledge; for it is our conviction that conceptually isolated research projects are of less consequence than research pertaining to an accumulating fund of information.

While serious cognizance was taken of the existing research literature, and while this literature guided the present project to a considerable degree, we did not allow any previous conceptualization of the problems involved to act as an intellectual strait-jacket. The research staff was encouraged to speculate about the research situation, and a number of hypotheses were developed from this speculation.

Finally, while some would consider empirical description a more mundane task than the testing of hypotheses, there were some aspects of the research problem that called for strict descriptive analysis. In these instances we defined the task as one of providing an accurate description of the educational instance under investigation. Of course, the utility of such description is always limited; however, accurate description can provide a fruitful basis for additional inquiry.

Footnotes

[1]For a description of the attitude scales employed, see Appendix C.

[2]Members of the research staff were able to informally interview most of the 29 persons who refused to complete questionnaires. Most of these 29 participants felt that the questionnaire was an inconsiderate imposition. They resented the time that was taken away from the program, and several stated that they would not have enrolled if they had known of the research. One participant refused because he felt that it was impossible for such research to guarantee anonymity. Finally, two members failed to fill out questionnaires for physical reasons; one forgot her glasses and one had injured her hand. The problem of resentment will be further discussed in Appendix F of this report.

[3]A 20% stratified random sample was drawn, with interviews being completed in 110 of the 115 cases selected. The sampling design is described in Appendix B.

[4]See Kaplan, *op. cit.;* Davis, *op. cit.* and Office of Education, Circular No. 539, *op. cit.*

[5]Kaplan, *op. cit.*, p. 23.

[6]See Appendix A for a general review of the literature pertaining to the problems addressed by this research.

[7]Kaplan, *op. cit.*, pp. 19-20.

[8]Davis, *op. cit.*, Table 17, p. 30.

[9]Kaplan, *op. cit.*, p. 20.

Chapter Three

GENERAL CHARACTERISTICS OF THE PARTICIPANTS

GENERAL CHARACTERISTICS OF PARTICIPANTS

Socio-Economic Characteristics

It requires only a superficial analysis of the data to reach the conclusion that the students enrolled in the Ways of Mankind Series were *not* representative of that statistically constructed class termed "average Americans." This particular course did *not* attract a "cross-section" of the population of the area. Consider the following findings with respect to the socio-economic characteristics of the study population:[1]

1. 62.2 per cent are female.
2. Of the males, 65.5 per cent are in professional occupational categories, with an additional 24.3 per cent being managers or proprietors.
3. 84.3 per cent have attended college. 47.9 per cent are college graduates.
4. 71.4 per cent are married.
5. 40.6 per cent are between the ages of 30 and 39 years.
6. 46.0 per cent of the population is Jewish as compared to 26.5 per cent Protestant, 4.0 per cent Catholic and 18.4 per cent who claim no religious preference.

We are dealing, then, with a population that is unusual in certain respects. In terms of education and occupation, the participants were recruited from an elite or near-elite population. Such uniqueness immediately raises certain important questions. It is obvious that our findings cannot be generalized to an "average American population." Can the findings be generalized to other adult education situations? How do the participants in the Ways of Mankind Series compare with those who enroll in similar adult education programs?

The N.O.R.C. study[2] and the Kaplan investigation[3] provide some basis for evaluating the representativeness of the Ways of Mankind study population. Table 1 summarizes five of the comparisons that can be made between the samples of the three studies. On the basis of this analysis, we can conclude tentatively that the participants in the Ways of Mankind Series are representative of persons who are attracted to non-credit, liberal arts, adult education programs.[4]

In terms of these general socio-economic factors, certain statistically significant differences were found to exist between lecture and discussion participants.[5] A significantly greater percentage of the lecture participants were over 40 years of age (46.1 per cent as compared to 36.9 per cent for the discussion groups). A higher percentage of the discussion group members were separated or previously married (divorced or widowed) than was the case for the lecture population (20.6 per cent as compared to 8.1 per cent). In terms of occupation, men in sales and women in clerical occupations were represented in significantly greater proportions among the discussion participants than they were in the lecture group. No significant differences were found in terms of religious preference or sex.

TABLE 1

Socio-Economic Characteristics of the Samples Employed in Three Investigations of Non-Credit, Liberal Arts, Adult Education Programs

Characteristic	Investigation		
	Ways of Mankind Study	N.O.R.C. Survey*	Kaplan Study**
Per cent female	62.2	63	62.7
Per cent of those in labor force who are in professional occupations	57.5	60	55.9
Per cent having some college education	84.3	84	88.0
Per cent married (includes separated)	71.4	77	79.3
Per cent between the ages of 30 and 40	41.2	37***	40.0

* Adapted from Davis, *op. cit.*, Part A.

** Adapted from Kaplan, *op. cit.*, Part II.

*** 30-39 years of age.

With respect to educational attainment, it was hypothesized that participants who enrolled in discussion groups would have had more formal education than participants who enrolled in lecture classes. Table 2 presents the data bearing on this hypothesis, demonstrating that in this instance the hypothesis must be rejected. With respect to educational attainment, no significant differences were found between discussion and lecture participants.

Attitudinal Characteristics

The study population can also be described in terms of certain attitudinal dimensions. The pre-questionnaire included six attitude scales: the Sanford "authoritarian-equalitarian" scale, items from two of the California "ethnocentrism" sub-scales, items from the Riecken "democracy" scale, the Webster scale of "tolerance of ambiguity," and a scale developed to measure attitudes toward adult education.[6]

The responses to these items indicate that the population, at the beginning of the program, was non-authoritarian, non-ethnocentric, and very favorably disposed toward adult education. On the democracy scale, which in general measures attitude toward democratic group procedures, and on the tolerance of ambiguity scale, the average scores fall in the middle of the range of possible scores. We interpret these latter findings as indicating a population that is neither fully committed to, nor particularly unconvinced of, the efficacy of democratic group procedures; and neither markedly tolerant nor particularly intolerant of ambiguous situations.

TABLE 2

Years of Formal Education Completed by Lecture and Discussion Participants

Years of Formal Education	Per cent Completing	
	Lecture Participants	Discussion Participants
College		
More than 4 years	22.5	25.5
4 years	24.7	23.1
1 to 3 years	39.6	32.8
High School or Less		
12 years	11.1	14.2
9 to 11 years	2.1	3.6
8 years or less	0.0	0.8
Total	100.0	100.0

As in the case of the socio-economic variables, certain small but statistically significant differences were found to exist between the discussion and lecture participants in terms of the attitudes they held at the beginning of the program. These findings are summarized in Table 3. While both

groups can be considered non-authoritarian, discussion participants were significantly less authoritarian than were the lecture participants. Similarly, the discussion population was significantly more tolerant of ambiguity and more committed to democratic group procedures than was the lecture population. No significant differences were observed in terms of ethnocentrism and attitude toward adult education.

Ability to Identify Anthropological Concepts

A highly educated population, like that enrolled in the Ways of Mankind Series, might be expected to have some familiarity with certain aspects of anthropology. Thus, it was expected that on any relatively short test dealing with anthropological concepts, the research population would demonstrate some degree of understanding. However, it was hypothesized that at the beginning of the program equal understanding of anthropological concepts would be demonstrated by the lecture and discussion sub-populations. A short "matching type" test was developed and included in the pre-questionnaire. Of a maximum score of 10, the average score for the discussion participants was 3.84, while the lecture participants averaged 4.34.[7] The observed difference is statistically significant, indicating that the lecture participants were able to identify significantly more of the concepts than were the discussion participants at the beginning of the program.[8] This finding obviously complicates the analysis of the relative "learning" that takes place in the situations being studied. We shall return to this discussion in a later section devoted to the comparative evaluation of the two teaching methods.

TABLE 3

Average Attitude Scores for Lecture and Discussion Participants As Measured at the Beginning of the Program

Attitude**	Average Scale Score	
	Lecture Classes	Discussion Groups
Authoritarianism-Equalitarianism[1]	2.59	2.36*
Democracy[2]	4.10	3.84*
Ethnocentrism[3] (Minorities)	1.94	1.81
Ethnocentrism[3] (Patriotism)	2.63	2.47
Tolerance of Ambiguity[4]	4.02	3.81*
Attitude toward Adult Education[5]	7.23	7.28

[1] Low scores indicate equalitarianism. Scale 1.00 to 7.00.
[2] Low scores indicate a *high* degree commitment to democratic group procedures. Scale 1.00 to 7.00.
[3] Low scores indicate a low degree of ethnocentrism. Scale 1.00 to 7.00.
[4] Low scores indicate a *high degree* of tolerance of ambiguity. Scale 1.00 to 7.00.
[5] High scores indicate a favorable attitude toward adult education. Scale 1.00 to 9.00.
* Indicates differences which are significant at the 0.01 level of confidence.
** See Appendix C for description of the attitude measurements employed.

Community Activities and Organizational Memberships

The interview schedules included questions dealing with the participants' community activities and organizational memberships. This information was desired for two reasons. First, information about community activities and organizational memberships was felt to be an important aspect of the total descriptive picture of the population under investigation. Secondly, certain of the hypotheses outlined in Chapter II pertain to community involvement. Specifically, two hypotheses pertaining to community activities were forwarded:

1. Membership in a discussion group will have greater consequence for the participant's involvement in his community than will membership in a lecture class.
2. At the beginning of the program, discussion group members will be less involved in their communities than is the case for lecture participants.

The first of these hypotheses will be examined in the chapter dealing with the effects of participation; data bearing on the second will be summarized in the present discussion.

Turning to the descriptive problem first, data pertaining to membership in voluntary organizations is reported in Table 4. The vast majority of the interview sample, 79.1 per cent, belongs to one or more such organizations. Inspection of the table also reveals that membership in organizations which are "locally oriented" (community civic and service groups, local P. T. A. chapters, etc.) is somewhat more prevalent than membership in national, regional or statewide organizations.[9] These findings indicate a population that has a greater number of organizational affiliations than the American urban population in general.[10] While the present data are not strictly comparable to the data presented by Kaplan and Davis, the general picture of a population that is highly involved in organizational activity is common to all three studies.[11]

TABLE 4

*Organizational Memberships of Participants**

Number of Organizational Memberships	Per cent Having Membership		
	All Organizations	National, State or Regional Organizations	Community-Oriented or Local Organizations
0	20.9	52.7	33.6
1	20.0	22.7	28.2
2	12.7	10.0	18.2
3	20.9	8.2	9.1
4	11.8	3.6	6.4
5 or more	13.6	2.7	4.5

* Interview sample, N = 110. (Throughout this report N refers to the base number on which the percentages were calculated.)

Not only are the participants active in voluntary organizations, they appear relatively active on the informal level as well. The data summarized in Table 5 indicate that on the average the participants in the interview sample visited informally in their friends' homes on approximately four different occasions during the month preceding the interview. In addition, friends visited in the participants' homes on about three different occasions during the same period. Thus, our "average" participant was engaged in informal visiting with friends on seven different occasions during the month that preceded the time of being interviewed.

TABLE 5

*Informal Visits with Friends During a One Month Period**

	Total Sample	Lecture Participants	Discussion Participants
Average number of visits in a friend's home.....	4.1	4.1	4.1
Average number of visits from friends in participant's home	3.2	3.1	3.3

* Interview sample; N = 100. Visits during month preceding time of interview.

The basic data pertaining to local community involvement are presented in Table 6. While the table reports certain characteristics of the total interview sample, we will direct attention only to the differences that exist between the lecture and discussion sub-samples. It was hypothesized that at the beginning of the program, discussion group members would be less involved in the activities and problems of their communities than would the lecture participants. Seven indications of involvement in the local community are reported. In all seven instances, lecture participants demonstrate a higher degree of community involvement than do discussion participants.

TABLE 6

*Degree of Involvement in Local Community**

Index	Total Sample	Lecture Participants	Discussion Participants
Per cent living in community 4 or more years.....	53	61	43
Per cent having 4 or more "good friends" living in the community	52	54	49
Per cent aware of "issues" facing their community..	50	62	33
Per cent "involved" in community "issues".....	22	26	17
Per cent belonging to two or more community organizations	38	42	33
Per cent visiting more often with friends residing in same community than with friends outside the community	31	38	21
Per cent having more visits from friends residing in same community than from friends outside the community	23	29	15

* Interview sample, N = 110.

These data, without exception, support the hypothesis.

Readership Characteristics of the Participants

In attracting participants, adult education programs must compete with a variety of intellectual and leisure time activities. This being the case, an adequate description of the population enrolled in the Ways of Mankind Series should include information on the recreational and non-vocational intellectual pursuits of the participants. Information concerning organizational memberships and informal community activities has already been presented. In addition, data pertaining to the participants' reading, television, motion picture and other recreational interests were collected during the interviews.

The basic findings with respect to reading behavior are reported in Tables 7 and 8. For the great majority of cases, the participants were in the process of reading one or more books at the time of the interview. In addition, the vast majority regularly reads a newspaper and one or more magazines. During the week preceding the interview, the participants sampled spent an average of 12.7 hours in reading, this time being divided about equally between newspapers, magazines and books.[12]

TABLE 7

Per cent of Interview Sample Reporting Readership of Newspapers, Magazines and Books

Type of Reading	Total Sample	Lecture Participants	Discussion Participants
Regularly read one or more daily newspapers..	92.7	93.5	91.3
Regularly read one or more magazines.....	94.5	100.0	87.5
Currently reading one or more books.....	74.5	72.6	77.1

TABLE 8

Average Time Spent During Past Week Reading Newspapers, Magazines and Books

Type of Reading	Mean Hours of Reading		
	Total Sample	Lecture Participants	Discussion Participants
Newspapers	4.3	4.5	4.1
Magazines	4.1	4.6	3.4
Books	4.3	4.3	4.2
All Reading	12.7	13.4	11.7

Information is also available as to the parts of the newspaper that were of greatest interest to the interviewees, the names of the magazines regularly read, and the titles of books recently completed or currently being read. With respect to the newspaper, the respondents were particularly interested

in "the news," editorials and the writings of columnists. This same type of interest is reflected in their selection of magazines; topping the list of regularly read magazines were *Time, Life,* and *Newsweek.*[13] The participants in the series, then, are apparently particularly concerned with being informed about current affairs and various interpretations of the events of the day.

Classification of the books the interviewees had recently read or were currently reading reveals that 48.5 per cent were fictional and 51.5 per cent non-fictional. For those enrolled in discussion groups, 57.4 per cent of the titles mentioned were non-fictional; the corresponding percentage for lecture participants was 47.1. Non-fictional titles were further analyzed according to the rather gross categories of the Dewey decimal system. The non-fiction read by the respondents most frequently was drawn from the Dewey categories of history (which includes biography), the social sciences, and philosophy (which includes psychology).[14]

Television Viewing and Motion Picture Attendance

Ninety-seven per cent of the interview sample owned a television set. Those owning sets spent an average of 4 hours per week viewing television programs.[15] On the average, the sample watched 3 television programs regularly, the "favorites" being *Playhouse 90, The Steve Allen Show,* and *Meet the Press.*[16]

The sample interviewed, again on the average, reported that they had seen two motion pictures during the month preceding the interview.[17] The three most widely seen motion pictures were *Indiscreet,* a sophisticated comedy, *Vertigo,* a suspenseful Hitchcock story, and *Gigi,* a light musical comedy.

Other Leisure Time Activities

In addition to the activities just described, participants who were interviewed reported a variety of other interests which they pursued during periods of leisure. Fifty-four per cent had engaged in some form of athletics during the week preceding the interview. Twenty-eight per cent had engaged in an activity involving one or more of the fine arts; 18 per cent in the role of spectator, 10 per cent as creative participants. Twenty-two per cent pursued some useful art or skill, ranging from rug-hooking to automobile mechanics. Seventeen per cent had played one of the variety of "table" games, with bridge being by far the most popular. Others had traveled, attended conferences, public lectures, or athletic events, pursued hobbies or "dined out." In general, then, the interview data present a picture of the participants as extremely active people, pursuing a variety of interests, and having what is at least stereotypically termed "full lives."

Summary

Participants in the Ways of Mankind Series constituted a population that differed in certain important respects from the general population of the Los Angeles metropolitan area. Educationally and occupationally, the study population can be considered an elite or near-elite group. They tended to be between 30 and 45 years of age, married, and residents of the western region of Los Angeles. Women and persons with a Jewish religious preference were over-represented among participants when compared to the general population of the area.

Despite the differences that were found to exist between participants and the population of the area, those enrolled in the Ways of Mankind Series appear relatively typical of adults enrolled in non-credit, liberal arts, adult education programs. When the present study population was compared to the samples employed in two other investigations of such educational programs, similarities were found with respect to sex composition, occupational status, educational attainment, marital status, and age. On the basis of these and similar findings with respect to such variables as organizational memberships, reading behavior, and television viewing habits, it appears reasonable to conclude that the present study population does provide an adequate basis for generalization.

With respect to their attitudinal position or orientation, the study population might be characterized as "liberal." The participants, on the average, are non-authoritarian and non-ethnocentric. At the beginning of the program, they held a very favorable attitude toward adult education. On two other attitudinal dimensions, tolerance of ambiguity and attitude toward democratic group procedures, the participants tended to receive scores in the middle or "neutral" range of the scales.

In terms of intellectual and recreational leisure activities, the study population must be considered very active. The majority belong to one or more voluntary associations or organizations. They engage in considerable informal visiting with friends. They read, on the average, more than 12 hours a week, watch 3 television programs regularly, and attend two motion pictures a month. In addition, they engage in a wide variety of activities such as participation in some form of athletics, theater attendance, and the pursuit of hobbies.

In general, then, the total population is a well-educated, professionally employed, liberal group which is engaged in many activities and pursuits. They are relatively comparable to other groups enrolled in liberal arts, non-credit, adult education programs.

Lecture participants were found to differ from discussion participants in certain respects. In terms of the present research problem, the major dif-

ferences between the two sub-populations at the beginning of the program were as follows:

1. Discussion participants were less authoritarian, more tolerant of ambiguity, and more committed to democratic group procedures than were lecture participants.
2. Lecture participants were able to identify a greater number of anthropological concepts than were the discussion participants.
3. Lecture participants were more involved with the activities and problems of their communities than were the discussion participants.

The importance of these differences at the beginning of the program will receive additional discussion at a later point in the analysis.

Small but statistically significant differences were found to exist between lecture and discussion participants in terms of three general socio-economic factors. Lecture participants were slightly older than discussion participants. Discussion group members were more likely to be widowed, divorced or separated than were lecture participants. Finally, there were small differences in the occupational categories from which the two groups were drawn.

Footnotes

[1]For a detailed summary of these characteristics see Table 2 and Tables 1A to 4A in Appendix D.

[2]Davis, *op. cit.*

[3]Kaplan, *op. cit.*

[4]Certain differences between the various populations must also be recognized. For example, 15 per cent of the N.O.R.C. sample was Jewish compared to 46.2 per cent of the present population. This difference may be accounted for in part by the particular characteristics of the Western Los Angeles region. Kaplan does not present data on religious affiliation; however, in personal conversation with Kaplan and his associates, the general opinion was expressed that the Jewish enrollment was heavy throughout the Los Angeles area.

[5]Unless otherwise specified, the 0.05 level of significance is employed throughout this report.

[6]For a description and discussion of the scales employed see Appendix C.

[7]One discussion group has been omitted from this analysis as the result of administrative difficulties.

[8] This difference is significant at the 0.01 level.

[9]The emphasis on membership in "locally oriented" or community organizations may be partially explained by the fact that the interview sample, like the total participating population, contained more females than males.

[10]See Charles R. Wright and Herbert Hyman, "Voluntary Association Membership of American Adults: Evidence from National Sample Surveys," *American Sociological Review,* Vol. 23 (1958), pp. 284-294.

[11]Kaplan, *op. cit.*, p. 13, and Davis, *op. cit.*, pp. 102-105.

[12]Davis reports relatively comparable findings for participants in Great Books Programs. ". . . 80 per cent of the Great Books respondents spend at least seven hours a week on their total reading, and 50 per cent spend 11 or more hours a week in reading." Davis, *op. cit.*, p. 85. Also see Kaplan, *op. cit.*, pp. 15-16.

[13]See Table 5A in Appendix D for data on the 15 most frequently read magazines.

[14]See Table 6A in Appendix D for summary of these data.

[15]For his sample, Kaplan reports that the median time per week spent watching television was 3.9 hours. Kaplan, *op. cit.*, p. 16.

[16]See Table 7A in Appendix D for data on most frequently watched programs.

[17]This does not include motion pictures seen on television. Twenty per cent of the sample reported that they watched motion pictures on television with some regularity.

Chapter Four

PREVIOUS PARTICIPATION IN ADULT EDUCATION PROGRAMS AND REASONS FOR ENROLLING

PREVIOUS PARTICIPATION IN ADULT EDUCATION PROGRAMS AND REASONS FOR ENROLLING IN THE WAYS OF MANKIND SERIES

Previous Experience in Adult Education Programs

Sixty per cent of the study population reported that they had taken adult education courses or series during the three years preceding their enrollment in the Ways of Mankind Series. For those who had participated in such programs within this three-year period, the average number of courses completed was 2.0. No differences were found between lecture and discussion participants in this area of experience.

The Ways of Mankind population also reported considerable previous experience as members of discussion groups, 58.5 per cent reporting membership in at least one such group.[1] Again, no significant differences were found to exist between lecture and discussion sub-populations.

In his investigation of participation in discussion groups, Kaplan reports considerable variation in the reactions of participants to such educational experience.[2] On the basis of this finding, it was hypothesized that the evaluation of any previous discussion experience would operate in the selection

of discussion or lecture presentation. More specifically, the following hypothesis was forwarded:

> For persons with previous discussion group experience, satisfaction with that experience will be directly related to the choice of the discussion series in preference to the lecture series.

The data bearing on this hypothesis are summarized in Table 9. The relationship between evaluation of previous discussion experience and the selection of discussion or lecture format is obvious from an inspection of the table.

TABLE 9

Evaluation of Previous Discussion Group Experience by Lecture and Discussion Group Participants

Evaluation	Participants		
	Lecture	Discussion	Total
Extremely valuable	14	43	57
Valuable	54	81	135
Not particularly or not at all valuable	43	9	52
Total	111	133	244

Chi squared = 40.72 Phi = 0.41 p less than 0.001

These findings may have considerable significance for the administrator of an adult education program. It seems reasonable to assume that for adult liberal arts programs to have their maximum impact, enrollments also must be maximized. The present findings can be interpreted as indicating a necessity for variety of program methodology if enrollment maximization is to be achieved. The question raised is, "Would the participants have enrolled in the present series if the type of presentation they preferred had not been available?" Data bearing on this question were collected in the present investigation.

> Those who enrolled in the lecture classes were asked the following:
> If all the lecture groups had been full, would you have been willing to participate in a discussion group devoted to the Ways of Mankind materials?

Discussion group members were asked a similar question regarding participation in a lecture class. The responses that were given to these questions are summarized in Table 10. Those lecture participants who were unwilling to enroll in discussion groups probably would not have taken the series if lecture presentation had not been available. If this were the case, 53.1 per cent of the lecture sub-population would not have enrolled in this series. Similarly, 35.4 per cent of the discussion sub-population would not have

enrolled if only lecture presentation had been offered.[3] Assuming this interpretation is justified, any adult liberal arts program that restricts itself to one form of program presentation is probably not maximizing enrollment. If such maximization is desired, a variety of program formats should be made available.

TABLE 10

Willingness to Enroll in the Series if Only the Alternative Form of Presentation Had Been Available

Willingness to Enroll in Alternative Form of Presentation (Discussion or Lecture)	Lecture Participants		Discussion Participants	
	N	% of those responding	N	% of those responding
Very Willing	41	17.8	68	28.7
Rather Willing	67	29.1	85	35.9
Rather Unwilling	75	32.6	55	23.2
Very Unwilling	47	20.5	29	12.2
Sub-total	230	100.0	237	100.0
No Response	5		12	
Total	235		249	

The Participants' Expectations Regarding the Program

In an effort to assess some of the motivational elements involved in participation, the following item was included in the pre-questionnaire:

> The following is a list of things that people sometimes expect to gain through participation in a program like the Ways of Mankind Series. Please check how important *each* of these expectations was for you in deciding to take this series.

A list of 12 "expectations" followed this introduction; the findings appear in Table 11. These data were gathered in order to examine the following hypothesis:

> Participants who are motivated by social considerations will prefer discussion groups to lecture classes; those motivated by traditional, intellectual interests will prefer the lecture situation.

The findings reported in Table 11 give very modest support to the hypothesis. By comparison with the discussion sub-population, a significantly greater percentage of the lecture participants emphasized increasing one's knowledge and increasing one's ability to understand one's self. By contrast, discussion participants placed more emphasis on the opportunity to make interesting friends. In addition to these statistically significant differences, the remaining differences tend to be in the direction hypothesized.

Two other aspects of Table 11 deserve mention. Over 50 per cent of the population definitely expected that their participation would increase their

knowledge of anthropology, their general knowledge, and their ability to understand other people. In addition, approximately 50 per cent also expected that the program would increase their ability to understand themselves, and their ability to think logically. This is certainly a "tall order" for a single series of 11 two-hour meetings, and it seems safe to conclude that the population entered the program with a high level of expectations.[4]

In addition to the generally high level of expectations that is evidenced in Table 11, the data show a high degree of similarity between the *patterns* of expectations of the lecture and discussion participants. The rank order correlation coefficient of 0.935 indicates a high degree of correspondence between the configurations of expectations of the two groups. As is suggested in the above hypothesis, such correspondence was *not* expected.

TABLE 11

Per cent of Lecture and Discussion Participants Rating Various Expectations as "Very Important"

Expectation	Per cent Rating "Very Important"	
	Lecture	Discussion
1. Increase my knowledge about the subject	66.7	48.0*
2. Increase my knowledge in general	69.4	60.8*
3. Increase my ability to understand myself	55.7	45.9*
4. Increase my ability to understand other people	66.7	64.2
5. Increase my ability to think logically	51.3	49.6
6. Provide me with an opportunity to fill a gap in my education	34.6	31.2
7. Increase my ability to work with others	33.9	33.7
8. Increase my ability to converse on this subject	21.3	21.2
9. Increase my ability to converse in general	25.6	30.7
10. Increase my ability to organize my thoughts quickly	32.3	39.4
11. Provide me with an opportunity to get out of an "intellectual rut"	24.7	28.1
12. Provide me with an opportunity to make interesting friends	6.2	12.8*

* Indicates percentages that differ significantly beyond the 0.05 level of confidence.
The rho between lecture and discussion ratings = 0.935.

Participants' Reasons for Enrolling

In addition to the question dealing with specific expectations, the pre-questionnaire included the open-ended question, "What are your major reasons for enrolling in the Ways of Mankind Series?" For 73.4 per cent of the participants, "interest in the subject matter" was included as one of their reasons for enrolling. Interest in the subject matter was the *only* reason given by 40.7 per cent of the population. While subject-matter interest was the most frequently stated reason for enrollment for both lecture and discussion participants, certain differences between the two sub-populations were observed. Of the lecture participants, 79.1 per cent gave this reason as compared with 68.2 per cent of the discussion group members.[5] Further,

for 51.6 per cent of those selecting the lecture form of presentation, interest in the subject matter was the *only* reason given for enrollment. The comparable percentage of those selecting discussion presentation was 30.6.[6]

The second most frequently expressed reason for enrolling in the Series had to do with the participant's desire to broaden his general intellectual interests or educational background. Many expressed the desire to be well informed in a large number of areas, including anthropology. They expressed the feeling that the "informed person" should have some familiarity with other peoples and cultures. These participants may not have been particularly interested in anthropology as such; they were interested in developing their intellectual horizons. Twenty-eight per cent of the lecture subpopulation and 24 per cent of the members of discussion groups cited the desire to broaden intellectual interests or educational backgrounds as a reason for enrolling.[7]

Two "social" reasons were cited more frequently by discussion participants than by those in lecture classes. The desire to share an experience with one's spouse or with a friend was given as a reason for enrolling by 6.4 per cent of those in discussion groups and 3.4 per cent of the lecture participants. Similarly, 4.4 per cent of the discussion group members gave as a reason for enrolling, "The desire to make social contacts"; the comparable percentage for the lecture population was 0.8.

The analysis of the answers to the open-ended question regarding reasons for enrolling in the Series seems to be in basic agreement with our findings with respect to expectations. While there is considerable agreement between the lecture and discussion sub-populations with respect to their reasons for enrolling in the program, discussion participants are more likely to stress interpersonal or social factors, while those in the lecture classes place more emphasis on the subject matter itself.

With respect to "interest in the subject matter," the most frequently given reason for enrolling in the Series, the pre-interview data permit some additional analysis. Eighty per cent of those interviewed claimed to have an interest in the subject of anthropology. In describing this interest, the majority of the respondents discussed anthropology in a very general and frequently rather vague fashion. We interpret this as indicating that while our respondents did have an interest in what they defined as anthropology, their conceptions of anthropology were not particularly precise. In general, they were interested in "man," "culture," "society" and related areas. They defined anthropology as one of the disciplines concerned with these broad areas; hence, they were interested in anthropology.

There were exceptions to the above description. Twenty-five of the 110 persons interviewed described their interests in terms of specific technical problems that are in fact treated by anthropology. Of these 25, 14 were

specifically interested in the problems, processes, or criticisms of cultural evolution. Despite such exceptions, the general picture of our respondents' interest in anthropology is best described in terms of a humanistic orientation toward, and an intellectual curiosity about, man and society. Such a description appears to hold for both lecture and discussion participants.

Summary

The population enrolled in the Ways of Mankind Series had considerable previous experience in adult education courses and in discussion group situations. In terms of this experience, no significant differences were found between lecture and discussion sub-populations. However, the participants' evaluation of any previous discussion group experience was significantly associated with the type of program presentation they selected in the present case. Furthermore, 53.1 per cent of the lecture sub-population expressed some unwillingness to enroll in a discussion series, and 35.4 per cent of the discussion participants expressed unwillingness to enter lecture classes. We interpret these findings as indicating a necessity for a variety of program presentation in adult education courses if maximum enrollment is desired.

The population began the program with high expectations of both an intellectual and social nature. It was hypothesized that discussion participants would place more emphasis on social factors than would lecture participants. By contrast, it was expected that lecture participants would emphasize traditional intellectual interests to a greater degree than would discussion group members. The data give modest support to these hypotheses. However, despite certain predicted differences between lecture and discussion participants, the two groups evidenced a high degree of similarity in terms of their patterns of expectations.

The data pertaining to reasons for enrolling present a picture like that given by the data on expectations. Again the expected differences in terms of social and intellectual motivation appear, and again the over-all similarity of pattern is apparent.

The most frequently cited reason for enrolling in the Series was interest in the subject matter of the course. For the most part, this interest appears to have been derived from general intellectual, liberal, and humanistic values pertaining to man and society. The desire to increase one's intellectual or educational interests, was the second most frequently cited reason for becoming involved in the Series. This, too, seems to be a part of the intellectual and humanistic "value system" that appears to have been characteristic of most of those who enrolled in the program.

Footnotes

[1]Examination of the interview data revealed that the respondents included participation in both educational and "non-educational" discussion groups in their reports of discussion group experience.

[2]Kaplan, *op. cit.*, Part III.

[3]These findings hold for both those with previous discussion group experience and those without such experience.

[4]In terms of the level and pattern of expectations, no significant differences were found between those participants who had recent experience in other adult education courses and those lacking such experience.

[5]This difference is statistically significant at the 0.01 level.

[6]This difference is statistically significant at the 0.001 level.

[7]As the result of multiple responses to the question, the percentages cited in this discussion sum to more than 100.

Chapter Five

ATTENDANCE

ATTENDANCE

The analysis of attendance records provides one general index of the participants' reactions to the Ways of Mankind Series. Admittedly, such an index is gross and suffers from certain limitations. Nevertheless, a highly committed individual who is interested in the program would be expected to continue his attendance. By contrast, where attendance is totally voluntary, the individual who reacts negatively to the program is likely to withdraw.

As can be seen in Table 12, during the eleven-week period, there was a general decline in attendance at both the lecture and discussion meetings. Individual discussion groups showed considerable variance in this respect, but all groups experienced some drop in attendance. Furthermore, despite minor fluctuations, the decline is probably best described as continuous and linear; no "leveling off" in attendance is particularly apparent.

This pattern might be interpreted as an indication of a continuous decrease in the interest of the participants. The longer the program continued, the smaller the proportion of the original population who were

interested enough to attend. In the present case, the confidence that can be placed in such an interpretation is lessened by the fact that the later meetings of all groups fell in the Christmas holiday period. Was the observed decline in attendance the result of waning interest in the program, or was this decline a consequence of increasing involvement in other activities associated with the holiday season?

TABLE 12

Attendance at the Eleven Meetings of the Lecture and Discussion Groups

Meeting Number	Attendance as a percentage of total original enrollment	
	Lecture	Discussion
1	92.2	91.1
2	92.9	88.1
3	83.0	78.5
4	74.9	75.4
5	69.3	74.1
6	59.4	67.6
7	64.3	72.7
8	60.8	58.0
9	43.1	58.0
10	52.7	53.9
11	46.3	56.3

In order to determine the degree to which the pressures of the holiday season influenced attendance, records were obtained for 34 discussion groups meeting during the Spring semester 1959. Leaders recorded attendance at the fourth through the tenth meetings of their groups.[1] Comparison of these data with those represented in Table 12 is made difficult by the fact that the Spring semester groups differed from the Ways of Mankind groups in certain respects.[2] The 34 Spring groups ranged in size from 9 to 28 members, whereas the discussion groups investigated in the basic study ranged from 22 to 28 members. For the Spring groups, the data pertaining to the relationship between size and attendance are summarized in Table 13. From

TABLE 13

The Relationship of Group Size to Attendance for 34 Discussion Groups, Meeting Spring Semester, 1959

Group Size	Per cent of Those Originally Enrolled Present at Meetings 4 Through 10						
	Meeting Number						
	4	5	6	7	8	9	10
22 to 28 (6 Groups)	70.5	70.5	63.0	52.1	46.6	52.7	54.8
16 to 21 (15 Groups) ...	76.1	75.4	73.9	64.3	70.0	67.1	66.4
9 to 15 (13 Groups)	79.3	71.8	70.7	66.7	63.8	76.4	69.0
All 34 Groups.....	75.7	73.2	70.3	63.6	62.5	66.3	64.3

an inspection of these data, it is clear that groups having between 22 and 28 members experienced a more marked attendance decline than did smaller groups. This being the case, size of group must be controlled when a comparison is made between the Spring groups and the Ways of Mankind study groups. When size of group is held constant, decline in the attendance at the Ways of Mankind groups is no greater than the decline evidenced in the Spring semester groups. These data are presented in Table 14.

TABLE 14

Attendance at 12 Ways of Mankind Discussion Groups, Meeting Fall Semester 1958, and 6 Groups of Comparable Size, Meeting Spring Semester 1959

Meeting Number	Attendance as a per cent of total original enrollment	
	Ways of Mankind Groups	Spring Semester Groups
4	75.4	70.5
5	74.1	70.5
6	67.6	63.0
7	72.7	52.1
8	58.0	46.6
9	58.0	52.7
10	53.9	54.8

Given the findings represented in Table 14, it is not possible to attribute the observed attendance decline to the particular scheduling of the program that was investigated. The decline observed in the "experimental" groups appears to have been normal for discussion groups of this size. Further, the imposition of the research procedures on the Ways of Mankind groups does not seem to have accentuated the tendency for attendance to decline. On the basis of the data at hand, we conclude that a relatively continuous decline in attendance is to be expected during the course of a liberal arts adult education program.

Interest in and Satisfaction with the 10th Meeting

Did those who were absent from the tenth meeting of the Series still consider themselves to be participants in the program? An answer to this question can be obtained through an analysis of the post-interview data. Of the 113 persons interviewed following the conclusion of the program, 46 were absent from the tenth meeting.[3] Of these 46 absentees, 17 (37 per cent) no longer considered themselves to be participants. Assuming the interview sample is representative of the total study population, this finding would lead to the estimate that 102 of the 276 persons who were absent from the tenth meeting had actually "dropped out" of the program.

During the post-interview, the interviewees were asked, "Did the Series live up to your expectations?" For those who were present at the tenth meeting, only 7.7 per cent stated flatly that the Series had failed to meet their expectations. By contrast, 39.1 per cent of those absent from the tenth meeting felt that their expectations were not met by the program. Similar findings were obtained from the analysis of a second question included in the post-interview. Those participants who reported that the Series *had* met their general expectations were asked, "Were there any ways in which the Series failed to meet your expectations?" For those who were present at the tenth meeting of the series, 46.7 per cent said that there were some aspects of the program that did not meet their specific expectations. The corresponding percentage was 71.4 for those who were absent from the tenth meeting. These findings with respect to participant expectations, summarized in Tables 15 and 16, demonstrate that those in attendance at the tenth meeting were more satisfied with the program than those who were

TABLE 15

Correspondence of the Program to Respondents' General Expectations and Attendance at the Tenth Meeting of the Series (Post-interview Sample)

Interview Response	Total** N	Total** %	Present N	Present %	Absent N	Absent %
Expectations were met by program.....	58	52.3	38	58.5	20	43.5
Expectations were partially met by program	30	27.0	22	33.8	8	17.4
Expectations were not met by program..	23	20.7	5	7.7	18	39.1
Total	111*	100.0	65	100.0	46	100.0

* Excludes 2 interviewees who stated that they had no expectations regarding the program, both of whom enrolled because they were urged to do so by friends.

** These findings are relatively comparable to those of the Kaplan Study. See Kaplan, *op. cit.*

TABLE 16

Reporting of Specific Expectations That Were Not Met by the Program and Attendance at the Tenth Meeting of the Series (Post-interview Sample)*

Attendance at Tenth Meeting	Total	Respondents reporting specific expectations that were not met: Number	Per cent
Present	60	28	46.7
Absent	28	20	71.4
Total	88	48	54.5

* Only the 88 interviewees who felt the program at least partially met their general expectations were asked about specific expectations.

absent from that meeting. Such findings indicate that the utilization of attendance as an index of participant reaction has some validity.

Factors Associated with Attendance at Tenth Meeting of Program

For the lecture sub-population two socio-economic characteristics were found to be associated with attendance at the tenth meeting of the Series. Participants attending the tenth lecture were somewhat older and had more formal education than those absent from that meeting. These relationships can be seen from the data presented in Tables 17 and 18; in both instances the relationships are small but statistically significant. For the lecture sub-population, no differences were found between those present at the tenth meeting and the absentees in terms of sex, occupation, or religion. For discussion group members, attendance at the tenth meeting was not significantly related to any of the general socio-economic variables that were measured.

TABLE 17

Attendance at the Tenth Meeting of the Series and Age of Participants

Age in years	Attendance at 10th Meeting							
	Lecture*				Discussion			
	Present		Absent		Present		Absent	
	N	%	N	%	N	%	N	%
19-38	46	38.7	62	57.4	78	57.8	62	58.5
39-48	42	35.3	28	25.9	40	29.6	29	27.4
49 & older	31	26.0	18	16.7	17	12.6	15	14.1
Total	119	100.0	108	100.0	135	100.0	106	100.0

* For the Lecture sub-population, chi squared = 8.11; p is less than 0.02; and phi = 0.19.

TABLE 18

Attendance at the Tenth Meeting of the Series and Formal Education of Participants

Formal Education	Attendance at 10th Meeting							
	Lecture*				Discussion			
	Present		Absent		Present		Absent	
	N	%	N	%	N	%	N	%
No College	9	7.4	22	19.8	23	16.5	22	20.2
1-4 years of college	76	62.8	72	64.9	80	57.6	61	56.0
Post-Graduate Education	36	29.8	17	15.3	36	25.9	26	23.8
Total	121	100.0	111	100.0	139	100.0	109	100.0

* For the Lecture sub-population, chi squared = 11.97, p is less than 0.01; and phi = 0.23.

A number of interpretations might be offered for the relationships of age and formal education to lecture attendance. For example, the relationship between attendance and education might be explained in terms of the level at which the lectures were delivered. If the lectures covered the subject matter at a relatively complex verbal level, those without the benefit of formal education may not have been able to follow the material. If this were the case, persons without formal education might be expected to withdraw from the program. Further examination of this speculative interpretation cannot be made on the basis of the data at hand. For the present purposes, these results are taken as totally descriptive; the provision of an explanation must await additional research.

Interpretation of the above findings is confounded by the results of the analysis of the relationship between attendance and scores on the tests employed to measure ability to identify anthropological concepts. While the difference is not significant, lecture participants who were absent from the tenth meeting were able to identify, on the average, slightly more anthropological concepts at the beginning of the program than were participants who were present at the tenth lecture. Given the finding that those who were present had more formal education than those who were absent, the findings with respect to test score are enigmatic. (See Table 19)

TABLE 19

Attendance at the Tenth Meeting of the Series and Performance on the Pre-test of Ability to Identify Anthropological Concepts

Attendance at Tenth Meeting	Mean No. of Concepts Correctly Identified	
	Lecture Participants	Discussion Participants
Present	4.24	4.10
Absent	4.45	3.50

For discussion group members, the situation with respect to test scores differs from that found for lecture participants. The data summarized in Table 19 show that those who were present at the tenth discussion group meeting achieved higher pre-test scores than did the absentees. In this instance, the difference is statistically significant. The explanation of this result may be found in pressures generated within the discussion situation. In a situation where each individual is expected to participate, those who are less informed about the subject under consideration may experience feelings of inadequacy. In the lecture situation, where active student participation is not expected, the individual is protected from such possible embarrassment. Such an explanation would lead to two specific hypotheses.

1. For participants in discussion groups, an individual's attendance will be positively related to the degree to which he is informed about the subject to be discussed.
2. The above relationship will not hold for the members of lecture classes.

The data reported in Table 19 give some support to these hypotheses; however, in the present instance, the analysis is largely *ex post facto,* and additional investigation is required prior to its acceptance. These findings are consistent with the *a priori* thinking about social pressure. It was hypothesized that the effects of social pressure would be more pronounced in the discussion situation than in the lecture situation. The present findings are compatible with this generalization.

Those who were in attendance at the tenth meeting also were compared with the absentees in terms of attitudinal position. For the discussion group members, consistent differences were found which again suggest the operation of selective factors within the discussion process itself. The data reported in Table 20 give some indication that the discussion process tended to discourage the continued participation of the more authoritarian, the less democratic, the less tolerant of ambiguity, and the more ethnocentric.

TABLE 20

Attendance at the Tenth Meeting of the Series and Original Attitudinal Position of Discussion Group Participants

Attitude[1]	Mean Attitude Scale Scores	
	Present at Tenth Meeting	Absent at Tenth Meeting
Authoritarianism-Equalitarianism	2.30	2.45
Democracy	3.80	3.90
Ethnocentrism (Minorities)	1.79	1.85
Ethnocentrism (Patriotism)	2.36	2.62
Tolerance of Ambiguity	3.79	3.83

[1] See notes to Table 3, Chapter III.

While none of the individual differences is statistically significant, the consistency of the pattern gives very modest support to the contention that selective factors were operative. As can be seen in Table 21, no such con-

TABLE 21

Attendance at the Tenth Meeting of the Series and Original Attitudinal Position of Lecture Class Members

Attitude[1]	Mean Attitude Scale Score	
	Present at Tenth Meeting	Absent at Tenth Meeting
Authoritarianism-Equalitarianism	2.59	2.59
Democracy	4.10	4.11
Ethnocentrism (Minorities)	1.94	1.94
Ethnocentrism (Patriotism)	2.68	2.58
Tolerance of Ambiguity	4.04	3.99

[1] See notes to Table 3, Chapter III.

sistency of direction is apparent for the lecture sub-population. Again these findings are consistent with the hypothesis that the effects of social pressure would be more pronounced in discussion groups than in the lecture classes.

Summary

Attendance at both the discussion meetings and the lecture classes declined throughout the course of the Ways of Mankind program. While certain fluctuations did occur, the decline is probably most adequately described as a continuous and linear function. Analysis of the attendance records of 34 additional discussion groups results in the finding of a similar attendance decline. On the basis of these results, it was concluded that a declining attendance pattern is normal for this type of educational program.

Analysis of information collected during the post-interviews indicates that those attending the next to last meeting (the tenth meeting) of the program were more satisfied with the Series than those who were absent from that meeting. This finding allows us to place some confidence in the utilization of attendance as an index of participant reaction. The satisfaction of lecture participants, when measured by presence or absence at the tenth lecture meeting, was found to be positively related to both age and formal education. No such relationships were found for discussion group members.

For those participating in discussion groups, members who were present at the tenth meeting achieved higher scores on the pre-test dealing with anthropological concepts than did those who were absent from the tenth meeting. No such difference was found for lecture participants. This finding was interpreted as being consistent with the general hypothesis that the effects of social pressure would be more pronounced in the discussion situation than in the lecture classes. The same hypothesis also received modest support from the analysis of the attitudinal position held by the participants at the beginning of the program. There is some suggestive evidence that the social pressures generated within the discussion situation tended to discourage the continued participation of the more authoritarian, the less democratic, the less tolerant of ambiguity, and the more ethnocentric members of the group. This relationship will be examined in greater detail in the sections of this report dealing with the effects of participation.

Footnotes

[1]The leaders were asked to estimate attendance at the first three meetings of their groups. In three instances, no such estimates were made, and in two additional cases, the leaders noted that they were uncertain as to the accuracy of their estimates. This being the case, the estimates of attendance at the first three meetings were not analyzed for there was no way of calculating the amount of error introduced by the estimation process.

[2]The Spring semester groups were devoted to five subject matter areas: Looking at Modern Painting, Discovering Modern Poetry, An Introduction to the Humanities, Economic Reasoning, and the Ways of Mankind. When the groups were classified by particular subject matter, no significant differences were found in attendance patterns.

[3]This analysis excludes the special post-interview sample of 23 persons. See Appendix B.

Chapter Six

EVALUATION OF PROGRAM BY PARTICIPANTS

EVALUATION OF THE PROGRAM BY PARTICIPANTS

Much of the data pertaining to the participants' evaluations of the Ways of Mankind Series were obtained from responses to the post-questionnaire. It must be remembered that only 288 of the 576 persons who originally enrolled in the program completed the post instrument. We have argued in Chapter V that attendance at the later sessions of the Series was related to interest in and satisfaction with the program. The data presented in Chapter V indicate that the information collected via the post-questionnaire does not contain a proportionate representation of the opinions of the least satisfied participants. Thus findings based on post-questionnaire data will be biased in a direction that overestimates the total population's satisfaction with the Series. In a number of instances, estimates can be made of the degree to which the post-questionnaire data are biased through comparison of these data with those gathered in the post-interview situation. The post-interview sample was drawn so as to be representative of those originally enrolled in the program; therefore, the post-interview material should reflect more accurately the range of the participants' reactions.

General Satisfaction with the Program

On the post-questionnaire, the participants were asked to rate their general satisfaction with the program. Seven response categories were provided, ranging from completely satisfied to completely dissatisfied. These satisfaction ratings are summarized in Table 22. Obviously, this is a gross measure

TABLE 22

Participants' Ratings of Their General Satisfaction with the Program

Rating of Satisfaction	Per cent Responding		
	Total	Lecture	Discussion
Completely Satisfied	18.4	24.6	13.3
Satisfied to a considerable extent	51.6	44.8	57.3
More Satisfied than Dissatisfied	20.1	20.9	19.3
Neither particularly Satisfied nor particularly Dissatisfied	4.2	2.2	6.0
Dissatisfied to some degree (3 categories combined)	5.7	7.4	4.0

Lecture N = 134. Discussion N = 150.

of general satisfaction; nevertheless, the results permit the conclusion that most of those attending the tenth meeting of the Series were relatively satisfied with the experience.

The 90.1 per cent of the post-questionnaire respondents who expressed some degree of satisfaction with the program might be compared to the 79.3 per cent of the post-interview sample reporting that the program met their general expectations to some degree.[1] As we would expect, the latter figure gives a more conservative estimate of general satisfaction with the program, but neither figure is particularly indicative of a disgruntled population.

Satisfaction with the program was analyzed in terms of the general socio-economic background factors of the participants.[2] Only religious preference and occupation were found to be significant correlates of satisfaction. For both lecture and discussion sub-populations, Protestants were more satisfied with the program than were Jews.[3] In the discussion groups, those in professional occupations expressed a higher degree of satisfaction than did non-professionals. It would have been desirable to analyze these relations further, but the size of the population is not sufficiently large to warrant a more detailed cross-classification.

General satisfaction with the program was also analyzed in terms of the participants' expectations with respect to the program. In only one of the 24 instances tested was there a significant relationship between placing importance on a particular expectation and satisfaction with the program. When one makes 24 comparisons of this type, it is expected that even where

no relationship exists, one of the 24 tests will reach statistical significance at the 0.05 level of confidence. Thus, we are only safe in concluding that the expectations of the participants as measured on the pre-questionnaire had no significant relationship with their over-all satisfaction with the program as measured on the post-questionnaire.

Plans to Take Additional Adult Education Courses

The generally high level of satisfaction with the Series is also reflected in the participants' plans regarding enrollment in additional adult education programs. In this instance, data are available from both the post-questionnaire and the post-interview. It has been argued that the post-interview material should reflect a less positive picture of the participants' reactions to the program than would be reflected by the post-questionnaire data. With respect to plans to enroll in additional adult education courses, this is not the case. Both Table 23 and Table 24 indicate that the vast majority of the population planned to continue to participate in adult programs, and by inference at least, these data support the conclusion that the population was generally satisfied with the Ways of Mankind Series.

TABLE 23

Participants' Plans to Take Additional Adult Education Courses

Participants' Plans	Post-Questionnaire Respondents Per cent Responding		
	Total	Lecture	Discussion
Definitely will take other courses.....	38.5	31.9	44.6
Probably will take other courses.....	55.5	59.3	52.0
Probably will not take other courses.....	6.0	8.9	3.4
Definitely will not take other courses.....	0.0	0.0	0.0

Lecture N = 135. Discussion N = 148.

TABLE 24

Interviewees' Plans to Take Additional Adult Education Courses

Interviewees' Plans	Post-Interview Sample Per cent Responding		
	Total	Lecture	Discussion
Definitely will take other courses.....	57.7	56.2	59.6
Probably will take other courses.....	37.8	37.5	38.3
Probably will not take other courses.....	3.6	4.7	2.1
Definitely will not take other courses.....	0.9	1.6	0.0

Preference for Lecture or Discussion Presentation

It was reported earlier that previous experience in discussion situations influenced an individual's choice of lecture or discussion formats in the present instance.[4] If these individuals enrolled in additional adult education

courses, would their participations in a particular type of experience influence their choice of format? Remembering that most participants expressed general satisfaction with the Series, it would appear that one consequence of participating in a particular type of educational experience is a desire for more of the same type of experience. In this instance, the experience apparently strengthened the original preference. (See Table 25.)

TABLE 25

Participants' Preferences for Lecture or Discussion Group Format At the Conclusion of the Ways of Mankind Series

Format Preference	Post-Questionnaire Respondents					
	Lecture		Discussion		Total	
	N	%	N	%	N	%
Definitely prefer lecture.....	54	40.3	13	8.8	67	23.8
Probably prefer lecture.....	45	33.6	16	10.8	61	21.6
No preference	13	9.7	7	4.7	20	7.1
Probably prefer discussion....	20	14.9	48	32.4	68	24.1
Definitely prefer discussion....	2	1.5	64	43.2	66	23.4
Total	134	100.0	148	100.0	282	100.0

Chi Squared = 110.01. Phi = 0.62.

The preferences reported in Table 25 were not without qualification. On the post-questionnaire and during the post-interview, the participants were asked to express their "likes" and "dislikes" about the program format. Fifty-two per cent of post-questionnaire respondents who were enrolled in lecture classes leveled criticisms at the lecture method of presenting material. The major theme of these criticisms was the participants' feeling that they would have profited more from the experience if they had been able to ask questions, discuss certain points, and take a more active part in directing the course of the presentation. For members of discussion groups, 22 per cent of those completing the post-questionnaire criticized the method of discussion presentation. According to these participants, the major shortcomings of the discussion method were its lack of structure, of authoritative presentation, and frequent failure to treat the major issues involved in a given area. In addition, for discussion participants, 20.7 per cent felt that there were times when their discussion groups suffered from too much "democracy" of leadership. Here the most frequent complaint concerned the type of group member who, as one respondent put it, "demanded the floor for long periods of time, and thought he had the right idea about everything." Thus, while some lecture participants continued to prefer lecture presentation to discussion methods, they expressed a desire for certain features which are characteristically associated with discussion group methods.

Similarly, some discussion group members expressed a desire for a learning situation that was somewhat more structured and more authoritative in both subject-matter presentation and leadership. These participants seemed to be suggesting a combination of the features of both methodologies within a lecture-discussion format.

While the post-interview respondents were not directly asked for opinions concerning a combination of lecture and discussion methods, the interviewers were specifically instructed to note where such suggestions occurred spontaneously. In 34 of the 113 post-interviews, the respondents specifically and spontaneously recommended the development of lecture-discussion programs. Such suggestions were made somewhat more frequently by lecture participants (35.4 per cent of those interviewed) than by discussion group members (22.9 per cent of those interviewed).

These findings indicate that those who preferred lecture to discussion methods at the time of enrolling in the Ways of Mankind Series continued to prefer lecture to discussion methods at the conclusion of the Series; however, a significant proportion of the lecture participants might have preferred a combination of lecture and discussion to either of the methods separately. For discussion group members, while they, too, maintained their preference for discussion methods when contrasted to lecture methods, many might have preferred a combined presentation to either of the methods alone.

Evaluation of the Reading Materials and the Recordings

With regard to the relative importance of the reading materials and the recordings used in connection with the Ways of Mankind Series, a hypothesis was derived from Kaplan's previous study.[5] Kaplan found that some discussion group participants felt the program suffered from the lack of a sub-

TABLE 26

Participants' Judgments of the Importance of the Reading Materials

Judgment	Lecture		Discussion		Total	
	N	%	N	%	N	%
Very Important or Rather important	101	73.2	117	79.1	218	76.2
Not too important or Unimportant	37	26.8	31	20.9	68	23.8
Total Responding	138	100.0	148	100.0	286	100.0

Chi Squared = 1.357 0.30>p>0.20.

ject matter authority who could provide information and answer questions of fact. It was hypothesized that as a result of the absence of such an authority in the discussion groups, participants in those groups would depend on

the authority of the readings and recordings to a greater degree than would those in the lecture situations. If this was the case, greater importance should have been attributed to these materials by discussion group members than by those in the lecture classes. As can be seen from Tables 26 and 27, the observed differences are in the expected direction; however, they are not of sufficient magnitude to be statistically significant.

TABLE 27

Participants' Judgments of the Importance of the Recordings

Judgment	Lecture		Discussion		Total	
	N	%	N	%	N	%
Very important or Rather important	106	76.8	126	85.1	232	81.1
Not too important or Unimportant	32	23.2	22	14.9	54	18.9
Total Responding	138	100.0	148	100.0	286	100.0

Chi Squared = 3.226 $0.10>p>0.05$.

The above findings with respect to reading materials are confirmed by data collected during the post-interviews. Post-interview respondents were asked: (1) "How interesting did you find the reading materials to be?" and (2) "Suppose there were no reading materials connected with the Series, how much of an effect would this have had on the program?" Again the observed differences tend to be in the expected direction, but again these individual differences are not large. (See Tables 28 and 29.) Thus, it appears that the reading materials played an important part in both the lecture and discussion sections. There is some evidence that reading materials may have had a slightly more important role in the discussion than in the lecture situation, but the observed differences are not particularly convincing.

TABLE 28

Participants' Interest in Reading Material

Interest in Readings	Post-Interview Respondents			
	Lecture		Discussion	
	N	%	N	%
Very interesting	26	41.3	26	55.3
Interesting	27	42.9	14	29.8
Not too interesting	8	12.7	6	12.8
Boring	2	3.2	1	2.1
Total	63	100.0	47	100.0

TABLE 29

Participants' Estimate of the Effect that the Lack of Reading Materials Would Have on the Program

Effect of Lack of Reading Materials	Post-Interview Respondents			
	Lecture		Discussion	
	N	%	N	%
Very great effect	31	48.4	28	58.3
Some effect	14	21.9	12	25.0
Little or no effect	19	29.7	8	16.7
Total	64	100.0	48	100.0

TABLE 30

Degree to which Lecturer or Discussion Leader Utilized the Reading Materials

Degree to which Readings were Utilized	Post-Interview Respondents			
	Lecture		Discussion	
	N	%	N	%
To a considerable degree	19	30.2	16	34.0
To some degree	27	42.8	13	27.7
To a limited degree	9	14.3	10	21.3
Little or not at all	8	12.7	8	17.0
Total	63	100.0	47	100.0

The post-interview respondents were also asked about the degree to which the reading materials were utilized. Again there is considerable similarity between the reports of lecture and discussion participants. (See Table 30.) Further, the comments of the interviewees about the use of the readings indicated that these materials played similar roles in the two types of learning situations. In the lecture situation, the lecturers frequently used the readings as a base upon which to develop their presentations. For the discussion groups, the readings frequently provided a common background from which discussion could progress.

Despite the fact that most of the participants felt that the readings were an interesting and important part of the program, 45.4 per cent of those interviewed recommended changes in these materials.[6] All but a few approved of the general format and organization, and the criticisms tended to be directed at specific selections. Some selections were felt to be too technical for an introductory presentation of anthropology. A number of participants also felt that the materials in certain sections introduced unnecessary repetition. A third general theme in these comments was the suggestion that the number of examples drawn from Western cultures should be increased.

The post-interview data pertaining to the participants' evaluations of the recordings are summarized in Tables 31 and 32. In terms of interest, the recordings received an even more favorable evaluation than did the

readings. Like the reading materials, the recordings were viewed as an important part of the total program, with the majority of participants feeling that the lack of such materials would affect the Series. Data summarized in Table 33 give some indication that the discussion groups utilized the recorded materials to a greater degree than did the lecturers. This also is reflected in the general comments of the interviewees. Of the discussion participants interviewed, 56 per cent reported that the recordings frequently provided the theme for the discussion, especially during the early stages of

TABLE 31

Participants' Interest in the Recordings

Interest in Recordings	Post-Interview Respondents: Lecture N	Lecture %	Discussion N	Discussion %
Very interesting	48	75.0	34	70.8
Interesting	7	10.9	11	22.9
Not too interesting	6	9.4	3	6.3
Boring	3	4.7	0	0.0
Total	64	100.00	48	100.0

TABLE 32

Participants' Estimate of the Effect that the Lack of Recordings Would Have on the Program

Effect of Lack of Recordings	Post-Interview Respondents: Lecture N	Lecture %	Discussion N	Discussion %
Very great effect	31	47.7	18	37.5
Some effect	20	30.8	17	35.4
Little or no effect	14	21.5	13	27.1
Total	65	100.0	48	100.0

TABLE 33

Degree to which Lecturer or Discussion Leader Utilized the Recordings

Degree to which Recordings were Utilized	Lecture N	Lecture %	Discussion N	Discussion %
To a considerable degree	21	32.3	21	43.7
To some degree	18	27.7	17	35.4
To a limited degree	12	18.5	7	14.6
Little or not at all	14	21.5	3	6.3
Total	65	100.0	48	100.0

an evening's meeting. By contrast, the most frequent use of the recordings in the lecture situation, according to the interviewees, was to illustrate a generalization or proposition that was forwarded by the lecturer.

TABLE 34

Participants' Judgments of the Effectiveness of the Lecturers and Discussion Group Leaders

Judgment of Effectiveness	Lecturers		Discussion Leaders		Total	
	N	%	N	%	N	%
Very Effective	61	45.2	68	45.9	129	45.6
Fairly Effective	48	35.6	65	43.9	113	39.9
Not too Effective	25	18.5	14	9.5	39	13.8
Ineffective	1	0.7	1	0.7	2	0.7
Total	135	100.0	148	100.0	283	100.0

As in the case of the reading materials, a number of the participants felt that the recordings could be improved in certain respects.[7] The fidelity of the recordings was criticized by some, as was the technical competence of the actors. In addition, some felt that the recordings were overly dramatic, and because of this, lost some instructional value. One respondent put this latter criticism as foliows:

> The recordings were more appropriate for high school students than adults. The whole thing tended to be overdone. I found that I lost the point in the midst of all those drum beats.

Despite such criticisms, it must be remembered that 73.2 per cent of the respondents described the recordings as "very interesting," and the majority felt that they were an important part of the total learning situation.

Evaluation of Discussion Group Leaders and Lecturers

Table 34 summarizes the participants' judgments of the effectiveness of the discussion leaders and lecturers, as reported on the post-questionnaire. Table 35 reports the same evaluations as made by the respondents during the post-interview situation. In this instance, the bias of the post-questionnaire sample is apparent; the post-interview sample was more critical of the

TABLE 35

Participants' Judgments of the Effectiveness of the Lecturers and Discussion Group Leaders

Judgment of Effectiveness	Post-Interview Respondents					
	Lecturers		Discussion Leaders		Total	
	N	%	N	%	N	%
Very Effective	29	44.6	18	38.3	47	42.0
Fairly Effective	16	24.6	14	29.8	30	26.9
Not too effective	6	9.3	4	8.5	10	8.9
Ineffective	14	21.5	11	23.4	25	22.3
Total	65	100.0	47	100.0	112	100.0

program's leadership than were those participants who completed the second questionnaire. If we base our conclusion on the post-interview data,

at least one out of five participants was dissatisfied with the program's leadership.

Some data are available pertaining to specific facets of lecturer or discussion group leader behavior. In this instance, more information is available about the performance of the lecturers than about the discussion group leaders. The lecturers could have erred in their judgments about the level at which to present their material; from the participants' point of view the lectures could have been too technical, trivial, or at the proper level of difficulty. The findings in this regard are reported in Table 36. The results would appear to indicate that for the most part the lecturers accurately judged the level at which their presentations should be made.

In addition, lecture participants were asked two specific questions about their instructors during the post-interview: (1) "How would you evaluate the lecturer in terms of the way in which he organized his material?" and (2) "Did it ever seem to you that the lecturer was not well prepared?" With respect to the first of these questions, 73.5 per cent of the lecture participants interviewed judged the organization of the lecturers' materials to be "Good" or "Excellent." With regard to preparation, 82.8 per cent said that the lecturer was "always well prepared."

TABLE 36

Lecture Participants' Judgments about the Level of Presentation of the Lecture Material

Response Category	Post-Questionnaire Respondents: Lectures Seemed Trivial		Lectures were Too Technical	
	N	%	N	%
Frequently	4	3.0	1	0.7
Occasionally	28	20.7	20	14.8
Rarely	49	36.3	49	36.3
Never	54	40.0	65	48.2
Total	135	100.0	135	100.0

Thus, the evidence indicates that the lectures were delivered at the correct level of difficulty, were well prepared and well organized. However, 21.5 per cent of the lecture participants interviewed felt that the lecturers were ineffective. What was it that these participants did not like about the lecturers? The post-interviews contained unstructured questions pertaining to the respondents' feelings about the lecturers' strengths and weaknesses While no specific weaknesses of the lecturers emerged from the analysis of these responses, two general "themes" run through the criticisms. The majority of the criticisms pertained to personal characteristics of the lecturers. Consider the following illustrative excerpts from the interview materials:

"At times he seemed shy."
"His voice was monotonic."
"At times he said 'uh' a lot."
"Sometimes he didn't seem comfortable."

It is difficult to know how to interpret these findings; however, it is undoubtedly a rare event when the personality of an instructor is totally pleasing to all the members of his class.

A second type of criticism was more characteristic of those who judged the instructor of their particular section to be ineffective. Here the criticism was more likely to be directed at the general style of presentation.

"He was too objective."
"His presentation was too tightly organized."
"He acted at times like he was teaching a class of freshmen."

Such criticisms may well indicate that the skills a university teacher develops in the performance of his regular duties are not totally appropriate to an adult education class. On the other hand, it must be remembered that 69.2 per cent of the lecture participants felt that their instructors were effective. In this regard, the findings appear to raise more questions than they answer, and the need for additional research is indicated.

With respect to the behavior of the discussion leaders, most of the available information does not bear directly on the leader himself; however, it does provide a basis for certain inferences. On the post-questionnaire, discussion participants were asked, "How frequently did your group's discussion seem somewhat trivial?" A similar question was asked of lecture participants. The responses to this question are summarized in Table 37. It is obvious from an inspection of Table 37 that "triviality" was considerably more of a problem in the discussion situation than in the lecture classes.

TABLE 37

Frequency with which Discussions and Lectures Seemed "Somewhat Trivial" to the Participants

	Lecture		Discussion	
	N	%	N	%
Frequently	4	3.0	21	14.1
Occasionally	28	20.7	76	51.0
Rarely	49	36.3	47	31.5
Never	54	40.0	5	3.4
Total	135	100.0	149	100.0

This result may be interpreted as indicating that discussion leaders were not capable of exercising adequate control over the discussion process. However, it may well be that a certain amount of trivial discussion is expected by the

participants, and is normal and necessary to any group process. It is common experience that in most group situations some light conversation generally precedes more serious matters. Additional research is required before we can determine if trivial discussion is unnecessary in adult educational groups. It may well be that such light, conversational exchange is a vital element in the process of group development and function.

Two additional questions about the conduct of the group were asked of discussion participants during the course of the post-interview: (1) "Were you able to participate in the discussion as often as you wanted to?" and (2) "Did one or a few members tend to dominate the discussion?" In answer to the first question 23.4 per cent of the discussion participants interviewed felt that they were not able to participate in the discussion as often as they wished. The responses to the second question can be summarized as follows:

"Did one or a few members tend to dominate the discussion?"

"Yes, always"	34.0 per cent
"Yes, sometimes"	44.7 per cent
"Never"	21.3 per cent

If it is the leader's responsibility both to allow participants to enter the discussion when they wish and to prevent domination of the discussion by one or a few members, these data indicate a considerable failure on the part of the discussion leaders. However, these demands are somewhat contradictory. Is it possible for a leader to maximize freedom of discussion and still control the behavior of the individual who tends to dominate the group? In the adult education discussion situation what is the optimum balance between freedom and control? Analysis of the responses to the open-ended interview questions indicates that the discussion leaders should have been less directive and still have exercised more control over the discussion process. To what degree can such a leadership role be achieved? Again, these are questions that might well be addressed by future research efforts.

Summary

In general, the participants in the Ways of Mankind Series evaluated their experience favorably. For the most part they were satisfied with the program and planned to take additional adult education courses. While they expressed certain criticisms of the reading and recorded materials, they felt these materials were an interesting and vital part of the program.

Participants who originally selected the lecture presentation maintained their preference for this method at the end of the Series. Similarly, discussion participants continued to prefer discussion methods to lecture methods. There is, however, some rather impressive evidence which suggests that a

considerable number of the participants would prefer a combined lecture-discussion format to either method alone.

With respect to the lecture participants' evaluation of their instructors, the picture is not completely clear. The instructors apparently presented their materials at the proper level of difficulty and in a well organized manner. The lectures were well prepared. Nevertheless, one member of the lecture population out of every five felt that the instructors were "ineffective." The participants who were least satisfied in this respect tended to criticize the general style of presentation. This finding may suggest that teaching liberal adult education classes requires a different set of skills than those required in the teaching of regular university students. Further research might well be directed at this problem.

Certain ambiguities also arise from the analysis of the evaluations of the discussion group leaders. Again, approximately one participant in five felt that the leadership of their group was ineffective. Many felt that their discussions were trivial at times. One in five felt that they were not able to participate in the discussion as much as they wished, while 78.7 per cent felt that at least on occasion one or a few members tended to dominate the group. Two general themes run through the criticisms that were made of the discussion leaders. Some felt the leaders were too directive. Others claimed that the leaders did not exercise sufficient control. Still others made both criticisms. Such findings suggest that the role of discussion leader in adult education may contain certain behavioral dilemmas which make it impossible for the leader to satisfy equally all of a group's members. Here, too, is an area deserving of additional investigation.

Footnotes

[1]See Table 15, Chapter 5.

[2]See Tables 8A through 13A in Appendix D.

[3]Reliable comparisons could not be made for all religious groups because of the small number of cases involved.

[4]See Table 9, Chapter IV.

[5]Kaplan, *op. cit.*, pp. 48-50.

[6]See Table 14A in Appendix D.

[7]See Table 15A in Appendix D.

Chapter Seven

EFFECTS OF PARTICIPATION IN THE WAYS OF MANKIND SERIES

Changes in the Ability to Identify Anthropological Concepts

A central criterion in the evaluation of any educational experience is the amount of learning that takes place. In the present investigation, attention was directed toward ascertaining the extent to which participants developed the ability to identify certain basic anthropological concepts. Admittedly, the "student" should learn more than this in any particular course of study; however, a knowledge of the fundamental concepts of a field is essential for an understanding of the principles and generalizations of that discipline. In other words, the ability to identify concepts was selected for measurement because it was felt that such ability is a necessary prerequisite for the development of a more general comprehension of an empirically oriented discipline.

With respect to the acquisition of information, which of course includes knowledge of concepts, two alternative hypotheses were forwarded:

1. No difference will be observed between lecture and discussion participants in terms of the amount of information acquired during the course of the program.

2. During the course of the program, participants in lecture classes will acquire more information than is acquired by participants in the discussion series.

It has been previously reported that at the *beginning* of the program the lecture participants were able to identify a larger number of the concepts included in the testing instrument than the discussion group members were able to identify.[1] This condition could have resulted in serious analytical complications. However, the program apparently exerted a selective influence on the participants in terms of their knowledge of anthropology.[2] For participants who were in attendance during the tenth meeting of the Series, no significant differences were found between lecture and discussion sub-populations with respect to their performance on the *pre-test*. Regardless of the reasons for the result, the consequence is a most "convenient" one for our research. For the participants completing both testing instruments, then, the lecture and discussion sub-groups were fairly comparable at the time they entered the program.

The test used in making the post-measurement was not identical with the one employed in the pre-questionnaire. In order to determine the relative difficulty of the two instruments, the tests were administered to 177 undergraduate students enrolled in Introductory Sociology or General Anthropology, during the final week of these courses. For these undergraduate students, the mean score attained on the pre-questionnaire instrument was 6.46; on the post-questionnaire test, the mean score was 6.51. On the basis of these results, we concluded that although the tests were not identical, they were of equal difficulty. (See Appendix G, (3) and (4), part III.)

Table 38 presents the mean scores on the two tests for the lecture and discussion participants.[3] At the beginning of the Series, the lecture subpopulation had a slightly higher average score than did the discussion subpopulation. At the end of the Series, the situation was reversed. While neither of these differences is statistically significant, the observations do lead to the rejection of the hypothesis positing superiority for lecture methodology in this area of learning. In terms of the ability to identify anthropological concepts, the members of the discussion groups learned at least as much as those in lecture classes.

In order to further compare the two methods in terms of the amount of learning that occurred, "improvement scores" were computed for each participant by subtracting his pre-test score from his post-test score. For example, a person who scored 3 on the pre-test and 7 on the post-test would have an improvement score of 4. Using these derived scores, comparisons were made for more homogeneous sub-groups within the two populations. The details of these comparisons are reported in Tables 16 A through 20 A in

Appendix D. In 10 of the 13 comparisons made, discussion participants show slightly greater improvement than do lecture participants. While the findings can only be considered suggestive, the discussion method as compared to the lecture method appears especially effective for females, nonprofessionals, and those who have never been to college. In terms of the improvement scores, no differences in the effectiveness of the two methods were found for older participants (39 or older) or male participants. In only

TABLE 38

*Participants' Ability to Identify Concepts of Anthropology as Measured During the First and Tenth Meetings of the Series**

Type of Presentation	Mean Test Scores	
	First Meeting	Tenth Meeting
Lecture	4.24	5.33
Discussion**	4.10	5.47

* Includes only those participants who completed both questionnaires.
** As a consequence of administrative difficulties one discussion group was omitted from this analysis.

one of the thirteen instances was the difference between improvement scores in a direction favorable to the lecture method. For participants who were professionals, those in the lecture classes improved their test scores to a greater extent than did those in the discussion groups. Because of the degree of inter-relatedness between the variables involved, and because of the small number of cases that are included in certain of the categories, the reliability of the observed differences is not subject to simple determination. The data do suggest a slight superiority for the discussion method; it will remain for further research to establish the degree of confidence that can be placed in such a conclusion.

The relationship between improvement in test score and the attitudes that the participants held at the beginning of the program was also investigated. Small but consistent relationships were found, and are reported in Table 21 A of Appendix D. Those who were less authoritarian, less ethnocentric, more tolerant of ambiguity, and more committed to democratic group procedures evidenced slightly more improvement in test scores than did the more authoritarian, more ethnocentric, less tolerant of ambiguity and less committed to democratic group processes. While the consistency of these results is of some general interest, no further analysis of the relationship of attitude to test score improvement was pursued because of the small size of the correlation coefficients.

Changes in Attitude

As has been discussed in Chapter II, two alternative, general hypotheses

were forwarded with respect to attitude change. A review of the experimental, social psychological literature[4] led to the first, namely:

1. As a result of participating in the Series, discussion group members will evidence greater attitudinal change than members of lecture classes.

Consideration of other research findings led to an alternative hypothesis:

2. During the course of the program, no change in the attitudes of the participants will be observed, regardless of whether these participants are members of a discussion group or members of a lecture class.

As in the case of the analysis that was made of changes in the ability to identify concepts of anthropology, the investigation of attitudinal change is limited to those participants completing both the pre- and the post-questionnaires.

For the five attitude scales that were included on the two forms of the questionnaire, the basic data are summarized in Tables 39 and 40.[5] The

TABLE 39

The Attitudes of Discussion Group Members as Measured During the First and Tenth Meetings of the Group

Attitude	Mean Scale Scores		Change from 1st to 10th meeting
	First Meeting	Tenth Meeting	
Ethnocentrism[1] (Patriotism)	2.36	2.34	−0.02
Ethnocentrism[1] (Minorities)	1.79	1.73	−0.06
Tolerance of Ambiguity[2]	3.79	3.65	−0.14
Democracy[3]	3.80	3.66	−0.14
Attitude toward Adult Education[4]	7.31	6.94	−0.37*

[1] Low scores indicate a low degree of ethnocentrism. Scale 1.00 to 7.00.
[2] Low scores indicate a *high* degree of tolerance of ambiguity. Scale 1.00 to 7.00.
[3] Low scores indicate a *high* degree of commitment to democratic group procedures. Scale 1.00 to 7.00.
[4] High scores indicate a favorable attitude toward adult education. Scale 1.00 to 9.00.
* The observed difference is significant beyond the 0.001 level of confidence.

TABLE 40

The Attitudes of Lecture Class Members as Measured During the First and Tenth Meetings of the Class

Attitude[1]	Mean Scale Scores		Change from 1st to 10th meeting
	First Meeting	Tenth Meeting	
Ethnocentrism (Patriotism)	2.68	2.58	−0.10
Ethnocentrism (Minorities)	1.94	1.90	−0.04
Tolerance of Ambiguity	4.05	4.02	−0.03
Democracy	4.10	4.00	−0.10
Attitude toward Adult Education	7.14	7.02	−0.12

[1] See notes to Table 39.

issue is not completely clear with respect to the two general hypotheses that were forwarded. In nine of the ten cases, the changes that did occur cannot be considered statistically reliable. In the tenth case, attitude toward adult education among discussion group members, a small but significant change was observed, and this change is in what might be considered an "undesirable" direction. Discussion group members were significantly less favorable toward adult education at the end of the Series than they were at the beginning. The small changes in the other four attitudinal areas, while not statistically significant, are in a consistent direction. Members of both populations became slightly less ethnocentric (on both of the scales employed), more tolerant of ambiguity, and more convinced of the efficacy of democratic group procedures. While these changes are not of sufficient magnitude to be statistically significant, even such minor alterations in attitude might be of some practical consequence if it can be assumed that additional research would verify the present findings.

In terms of the hypotheses that were advanced at the general level, the results do not allow the clear rejection of either. In four of the five instances, the changes that did occur were greater in the discussion groups than in the lecture population, but the differences are slight indeed. In terms of the second hypothesis, while it is true that only one statistically significant change did occur, some changes were observed, and these changes were in the same direction for both populations.

In addition to the two general hypotheses, a number of more specific hypotheses were advanced with respect to attitude change. In Chapter II, the following was forwarded:

> Discussion group members will evidence greater change on the Riecken democracy scale than will lecture participants.

Both sub-populations became slightly more accepting of democratic group procedures. The change for the members of discussion groups is greater than that for the lecture groups, but the difference is so small that it can be interpreted readily as a chance fluctuation.

A second specific hypothesis was derived from what might be called the "folklore" of anthropologists. One does hear the claim from anthropologists that the study of their discipline makes the student aware of such things as cultural relativity, cultural variation, and cultural change, and that such knowledge is likely to decrease the ethnocentric attitude of the student. On the basis of such assumptions, the following hypothesis was formulated:

> Participation in the Ways of Mankind Series will result in a decrease in the ethnocentrism of the participants.

In both groups, slight decreases in ethnocentrism were observed. This is true for both of the measures of ethnocentrism that were employed. Again

we are in the difficult interpretive position of having findings that are in the direction predicted but are attributable to chance variation on the basis of certain statistical tests. In such a position, no direct interpretation can be made with much confidence.

The findings with respect to attitude toward adult education are of particular interest. The participants were less favorable in their attitudes toward adult education at the end of the program than they were when the program started. In the case of the discussion groups, this decrease is significant statistically. The finding is clear but interpreting the result is most difficult. Here is a population with a very favorable attitude toward adult education, starting the program with high expectations. At the completion of the Series, the population indicates a general satisfaction with the experience; however, they are less favorable in their attitudes toward adult education at the conclusion of the Series than they were at the beginning.

A consideration of the observed scores suggests one tentative explanation of this apparent contradiction. The scores at the beginning of the Series were extremely high. Perhaps such scores indicate an unrealistically positive attitude; perhaps the participants expected too much. If this is the case, then the decline in these attitude scores may indicate that the participants assumed a more realistic attitude in this regard as a result of their experience in the program. It must be stressed that the post-scores indicate that the participants continue to be very favorable in their attitudes toward adult education. It may be that a certain naïveté was lost through experience. This interpretation is subject to some further test on the basis of the available data. If the interpretation is correct, persons with previous experience in adult education should have evidenced less of a change in this attitude than that evidenced by those for whom this was the first experience.

TABLE 41

Previous Experience in Adult Education Courses and Change in Attitude toward Adult Education

Number of previous Adult Education courses completed	Change in Mean Score on Attitude toward Adult Education Scale			
	Lecture		Discussion	
	N	Change in Mean Score	N	Change in Mean Score
None	48	−0.1	44	−0.3
One	32	0.0	36	−0.2
Two	17	−0.2	32	−0.4
Three	10	−0.2	12	−0.3
Four or more	12	+0.2	13	−0.4

The data summarized in Table 41 indicate that the above explanation is not adequate in the present instance. The attitudes of the participants

with the greatest amount of adult education experience show no more stability than do the attitudes of participants with no previous experience. A number of alternative explanations for these findings might be offered. For example, the evidence does indicate that the Ways of Mankind Series was successful in the minds of most participants. Perhaps participation in such a successful program raised the standards by which the participants evaluated education as a whole. If the bases for evaluation became more demanding, then the evaluation of adult education as an object may be more critical. Other explanations might involve the general enthusiasm with which a person begins a new experience, a "fatigue" factor resulting from weekly evening meetings, or perhaps the finding is only a statistical artifact.[6] Again the resolution of the issue requires additional investigation.

Social Pressure and Attitude Change

In Chapter II, we stated that social pressures are generally viewed as factors which reduce attitudinal heterogeneity within a group. In most of the research literature dealing with this problem, the observation of increased attitudinal homogeneity is taken as evidence for the operation of social pressure. Is there any evidence of such a process operating within the Ways of Mankind groups?

A first analysis of the data was made by classifying the participants according to their original attitudinal position. If social pressure operated in the fashion described above, participants who were originally at the extremes of an attitude distribution would be expected to alter their positions toward the "normal" attitude of the group. If it is assumed that the mean attitude

TABLE 42

Average Change in Ethnocentrism (Patriotism) Scores by Original Position on the Sub-Scale

Ethnocentrism (Patriotism) score at the beginning of the program	Lecture		Discussion	
	N	Mean Change on E(P) Scale	N	Mean Change on E(P) Scale
1.00-1.99	30	+0.23	53	+0.24
2.00-2.99	49	−0.15	46	−0.05
3.00-3.99	23	−0.12	29	−0.17
4.00 or higher.....	17	−0.61	10	−0.82
Mean Pre-Test Score.....		2.68		2.36
Mean Post-Test Score....		2.58		2.34

score is the norm for the population, the data summarized in Tables 42 through 46 give some evidence of the operation of social pressure. For all five of the attitudes measured, there is evidence of increased homogeneity. The observed change is consistently in the predicted direction; even the

TABLE 43

Average Change in Ethnocentrism (Minorities) Scores by Original Position on the Sub-Scale

Ethnocentrism (Minorities) score at the beginning of the program	Lecture N	Lecture Mean Change on E(M) Scale	Discussion N	Discussion Mean Change on E(M) Scale
1.00-1.99	72	+0.11	90	+0.14
2.00-2.99	32	−0.18	37	−0.26
3.00-3.99	8	−0.88	8	−0.47
4.00 or higher	5	−0.83	3	−2.17
Mean Pre-Test Score		1.94		1.79
Mean Post-Test Score		1.90		1.73

TABLE 44

Average Change in Tolerance of Ambiguity Scores by Original Position on the Scale

Tolerance-of-Ambiguity score at the beginning of the program	Lecture N	Lecture Mean Change on T.A. Scale	Discussion N	Discussion Mean Change on T.A. Scale
2.99 or less	17	+0.43	22	+0.21
3.00-3.99	34	+0.06	56	−0.16
4.00-4.99	51	−0.02	49	−0.18
5.00 or higher	16	−0.49	10	−0.58
Mean Pre-Test Score		4.05		3.79
Mean Post-Test Score		4.02		3.65

TABLE 45

Average Change in Democracy Scores by Original Position on the Scale

Democracy score at the beginning of the program	Lecture N	Lecture Mean Change on Dem. Scale	Discussion N	Discussion Mean Change on Dem. Scale
2.99 or less	10	+0.42	22	+0.22
3.00-3.99	42	0.00	48	−0.01
4.00-4.99	46	−0.01	59	−0.27
5.00 or higher	17	−0.72	10	−0.67
Mean Pre-Test Score		4.10		3.80
Mean Post-Test Score		4.00		3.66

TABLE 46

Average Change in Attitude toward Adult Education Scores by Original Position on the Scale

Attitude-toward-Adult-Education score at the beginning of the program	Lecture N	Lecture Mean Change on A.A.E. Scale	Discussion N	Discussion Mean Change on A.A.E. Scale
7.50 or higher	48	−0.30	73	−0.53
7.00-7.49	38	−0.22	30	−0.24
6.50-6.99	19	+0.11	18	+0.14
6.49 or less	14	+0.76	17	+0.33
Mean Pre-Test Score		7.14		7.31
Mean Post-Test Score		7.02		6.94

magnitudes of the changes of the various sub-groups demonstrate considerable consistency with what would be expected.

The data do depart from expectation in one respect. We had assumed that the effects of social pressures would be greater in the discussion situation than in the lecture classes. The data reported in Tables 42 through 46 do not support this contention; however, in this instance additional analysis of the relationships involved was possible.

The raw attitudinal scores were converted into standard scores for each of the 12 discussion groups and the 3 lecture classes. Thus, each participant's score was expressed in terms of his position within his own group. Converting the scores to standard scores permits us to make certain comparisons of the relative positions of individuals in different groups. With these calculations in hand, we studied the relationship between original attitudinal position and attendance at the tenth meeting of the program. This was done in order to test two of the hypotheses that we had developed:

1. As a consequence of social pressure, the more the individual's attitude differs from the norm of his group, the greater the likelihood that the individual will leave the group.
2. The relationship specified above will be more pronounced in discussion groups than in lecture classes.

The basic data used in this analysis are summarized in Table 47. Participants whose original scores, on a given attitude scale, were 1.5 standard deviations, either above or below the mean of their group, were combined. These individuals were considered "attitudinally deviant." The per cent of these attitudinal deviants who were present at the tenth meeting of the Series was then determined. In terms of all five attitude measures, the percentage of members of discussion groups who were both deviants and absent from the tenth meeting of the Series is greater than for the lecture partici-

TABLE 47

Original Attitudinal Position and Attendance at the Tenth Meeting

Attitude	Percentage of those defined as "Attitudinally Deviant" who were absent from the tenth meeting (P_a)	
	Lecture	Discussion
Ethnocentrism (Patriotism)	40.0	51.7
Ethnocentrism (Minorities)	36.8	48.0
Tolerance of Ambiguity	40.0	58.3
Democracy	44.4	50.0
Attitude toward Adult Education	33.3	50.0

pants. We have previously presented data that establish that attendance at the tenth meeting was related to interest in and satisfaction with the program.[7] Further, it has been estimated that 37 per cent of those absent from

the tenth meeting had "dropped out" of the program.[8] Given these earlier findings, we conclude from Table 47 that the importance of a "non-deviant" attitudinal position for both satisfaction with the program and continued participation in the program is more pronounced for discussion group members than for those in the lecture classes. If we employ the social pressure framework to interpret these results, the findings suggest that the consequences of social pressures were greater in the discussion groups than in the lecture classes.

Suppose it had been hypothesized that attitudinal position was of no importance in terms of attendance at the tenth meeting of the program. If this were the case, then we should have been able to predict the percentage of attitudinal deviants who would be absent from the tenth meeting of the program from our knowledge of the percentage of the total population absent from that meeting. In other words, let:

P_e = the percentage of the total population absent from the tenth meeting of the program.

P_a = the percentage of the "attitudinally deviant" absent from the tenth meeting of the program.

Then, if attitudinal deviance has no relationship to attendance at the tenth meeting:

$P_a/P_e = 1.0$

The above ratios were computed for both the lecture classes and the discussion groups, and are reported in Table 48. In each instance, the ratio for the discussion sub-population is greater than one, indicating that attitudinal deviants were less likely to be in attendance at the tenth meeting than were the non-deviants. Exactly the reverse is the case for the lecture sub-population.

TABLE 48

The Ratio of the Per cent of Attitudinal Deviants Absent from the Tenth Meeting of the Program (P_a) to the Per cent of All Participants Absent from the Tenth Meeting of the Program (P_e)

Attitude	P_a/P_e	
	Lecture	Discussion
Ethnocentrism (Patriotism)	0.85	1.12
Ethnocentrism (Minorities)	0.78	1.04
Tolerance of Ambiguity	0.85	1.26
Democracy	0.94	1.08
Attitude toward Adult Education	0.70	1.08

The data, then, give support to the hypotheses concerning social pressure and withdrawal from the group, but only for discussion group members. For lecture participants, the reverse is true: individuals whose attitudes

differ from the norm of their groups tend to maintain membership to a somewhat greater extent than do individuals whose attitudes are at or near the norm of their groups.

The social pressure framework, then, is capable of providing certain predictions with respect to the behavior of discussion group members. It fails to provide such predictions for the lecture situation. In the lecture situation, the participant does not have to speak; he does not have to make his views known. Does the attitudinal deviant know that he is a deviant, and is he relieved to be in a position where his deviancy is in a sense protected? Does such relief make him more appreciative of the situation and, thus, more likely to continue attendance than one whose attitude is not deviant and who does not feel any desire to be "protected" from the group? Again the answers to such questions must await additional research, but some speculation about the potential significance of these findings may be in order. If the objectives of a program are directed at changing attitudes, and if participation in the program is totally voluntary, the above findings, if verified, may have considerable practical importance. In the discussion situation, it may well be that the very person whose attitude "should" be changed is the person who is least likely to continue participation. The findings suggest that when it is desirable to reach a population with considerable attitudinal heterogeneity, the lecture method may be most effective because it appears to "hold" the deviant to a greater degree than does the discussion method.

Finally, with respect to social pressure and attitude change, certain hypotheses regarding size were developed:

> For groups of the same size, the tendency toward attitudinal homogeneity will be greater in discussion groups than in lecture classes.

In this instance, the tendency toward increased attitudinal homogeneity was measured by first computing the variance of the distribution of attitude

TABLE 49

Mean Change in the Variance of Attitude Scores for Discussion Groups and Lecture Classes of Comparable Size

Attitude	Mean Change in Variance	
	Discussion Groups (12 Groups)	Lecture Classes (2 Classes)
Ethnocentrism (Patriotism)	−0.12	+0.16
Ethnocentrism (Minorities)	−0.09	+0.03
Tolerance of Ambiguity	+0.26	+0.07
Democracy	+0.46	−0.22

scores for each separate group or class on each of four attitudinal scales.[9] If the variance of a distribution of attitude scores decreases from the pre-

measurement to the post-measurement, we will conclude that the attitudinal homogeneity of the group members increased during the program. Once the above computations had been completed for the individual groups, the average change for the 12 discussion groups and the two small lecture classes was determined. These indices are reported in Table 49. The hypothesis holds for both measures of ethnocentrism, but must be rejected for the measures of tolerance of ambiguity and democracy. Thus, we cannot conclude in general that the tendency toward attitudinal homogeneity, as measured by the variance of a distribution, is greater in discussion groups than in lecture classes of the same size.

There is another feature of Table 49 that requires discussion. Attitudinal homogeneity, as measured by average variance, *decreased* in two of the four cases for the discussion groups, and in three of the four instances for the small lecture classes. These findings seem contradictory to those reported earlier in connection with the data summarized in Tables 42 through 46. The finding of this inconsistency led us to a further inspection of the frequency distributions for the various attitudes. While the distributions of the individual groups are based on small numbers of cases, examination of these distributions is suggestive. Especially in the case of the democracy scale scores, the post-distributions tended to be flatter in their central sections than did the pre-distributions. To put this technically, the pre-distributions were more leptokurtic (more peaked) than the post-distributions. In addition, the pre-distributions tended to be more skewed in the direction of high attitude scores than did the post-distributions. In terms of the movement of individuals, those originally in the center of the distribution tended to spread out around the group mean, while those originally at the upper extreme of the distribution tended to move toward the mean. These results indicate that for certain types of attitudes, the social forces operative in a group may influence the members differentially depending on their original attitudes.

A second hypothesis with regard to the relationship of size and attitudinal homogeneity was discussed in Chapter II.

> The tendency toward attitudinal homogeneity will be greater in the small lecture classes than in the large lecture class.

The findings, here, summarized in Table 50, are again inconsistent. The hypothesis tends to be supported in two cases and contradicted in one. In the fourth instance, there is no difference between large and small classes in this regard.

Changes in Reading and Viewing Habits of Participants

How did the fact that the participants were involved in a program that met weekly and included reading materials affect their general reading

habits? For both lecture and discussion participants, the time spent in reading newspapers and magazines shows some decrease. With respect to books, lecture participants increased while discussion participants cut down their average reading times. When the amount of time that was spent by the participants in reading the Ways of Mankind materials is considered, the data presented in Table 51 indicate that participation in the program may have had some differential effect on the total time that the participants spent in reading. Lecture participants increased their reading time 8.2 per cent; discussion participants decreased their time 6.0 per cent.

TABLE 50

Change in the Variance of Attitude Scores for Lecture Classes of Different Sizes

Attitude	Change in Variance	
	Large lecture class	Mean change for 2 small classes
Ethnocentrism (Patriotism)	−0.15	+0.16
Ethnocentrism (Minorities)	+0.02	+0.03
Tolerance of Ambiguity	+0.27	+0.07
Democracy	+0.02	−0.22

TABLE 51

Average Time Spent During Past Week Reading Newspapers, Magazines, Books and Course Materials (Post-Interview Respondents)

Type of Reading	Mean Hours of Reading			
	Lecture		Discussion	
	Pre-Interview	Post-Interview	Pre-Interview	Post-Interview
Newspapers	4.5	3.5	4.1	2.8
Magazines	4.6	3.8	3.4	3.2
Books	4.3	5.1	4.2	2.7
Ways of Mankind Readings*	—	2.1	—	2.3
All Reading	13.4	14.5	11.7	11.0

* Based on responses to post-questionnaire.

Post-interview respondents were asked, "As a result of your participation in the Series, have you read any books that you might not have read otherwise?" Thirty per cent of the lecture participants and 27.8 per cent of the members of discussion groups answered this question affirmatively. Those who answered this question in the affirmative were then asked for the titles of such books. These titles ranged from highly technical works like the *Selected Writings of Edward Sapir* to novels like *Brave New World*.

The respondents were also asked about changes in their newspaper and magazine reading behavior. As a consequence of their participation, 21.0

per cent felt that there had been some change in their magazine reading, and 9.0 per cent felt that their newspaper reading habits had changed. The changes that were mentioned were of two types: (1) some felt that they were reading more critically than they had before, and (2) some stated that they had developed new areas of reading interest. The following excerpts are illustrative:

> "I look at news in a different light . . . I look at these things more in terms of their societal context."
>
> "I have a different approach – a more critical approach."
>
> "I see things that pertain to what we've discussed. Things on Indians and primitive societies."
>
> "I read articles in *Time* that I wouldn't have read, like 'World Affairs' and 'Hemisphere.' "

With respect to reading behavior, then, the program had little or no reported effect on the majority of the participants. However, participation in the program was seen by at least 30 per cent of the participants as having an effect on the reading they selected. Given the type of population involved, an effect of such magnitude probably should not be considered insignificant. No large differences were noted between lecture and discussion participants in this behavioral area.

Participation in the program apparently had the effect of decreasing the amount of time the participants spent in attendance at motion pictures and in viewing television. The average time spent per week viewing television dropped from 4 to 3.5 hours. The average number of motion pictures seen in the month preceding the pre-interview was 2, while the average number seen during the month preceding the post-interview was 1.2. Again, only small differences between lecture and discussion participants were observed.

With respect to the participants' taste in magazines and television programs, little change was observed. *Time* and *Life* continued to be the most popular magazines, and *Playhouse 90* maintained its popularity leadership among television programs. The only striking alteration in these lists was that of the television program *Omnibus,* which rose from the twenty-seventh to the second most popular program.

Changes in Friendship Patterns, Community Involvement, and Organizational Membership

In terms of its magnitude, the greatest difference observed between lecture participants and members of discussion groups occurred in the area of the formation of new friendships. For those in discussion groups, 37.9 per cent developed friendships with other group members. The corresponding figure for the lecture participants was 6.9 per cent. The majority of the new

friends made by discussion group members resided within the same general community, and prior to the conclusion of the program, several discussion group members were involved in new patterns of informal social contacts. These observations correspond to the hypotheses forwarded in Chapter II.

There is also some evidence that by the conclusion of the program the members of discussion groups had increased their degree of involvement in their communities. Of the discussion group members interviewed during the first weeks of the program, 33 per cent were aware of issues facing their communities. Of those interviewed following the conclusion of the program, 56 per cent knew of issues involving their communities. While the percentage of discussion participants personally involved in action regarding these issues did not change (17 per cent for the pre-interviewees, and 16 per cent for the post-interviewees), the percentage of those who knew of the action that was being taken by their communities increased from 30 for the pre-interviewees to 53 for the post-interviewees. For the lecture participants, there is no indication of change in community involvement. These data are summarized in Table 52. As in the case of friendships, the changes observed in community involvement support the hypothesis regarding this behavioral area.

TABLE 52

Changes in the Community Involvement of Lecture and Discussion Participants

Index of Community Involvement	Lecture		Discussion	
	Pre-Interview	Post-Interview	Pre-Interview	Post-Interview
Per cent aware of "issues" facing their community.	62	60	33	56
Per cent aware of community action on community issues	58	60	30	53
Per cent "involved" in community issues	26	29	17	16

Can the above observations be attributed to differences in the teaching methods being compared? It is possible that the changes in the friendship patterns and community involvements of discussion members was not due to the methods employed in the conduct of their sections of the Series. The observed differences might be accounted for by the fact that discussion groups were community centered and that lecture groups were university centered. Would community-centered lectures delivered to relatively small lecture classes have similar effects? Certainly this possibility must be investigated prior to our assigning the observed changes to the discussion methods employed.

With regard to organizational membership, there is almost no evidence of any change resulting from participation in the program. Of the 113 persons interviewed following the completion of the program, only two reported that the program had had consequences for their organizational interests or memberships. One lecture participant reported that he was going to join the American Antiquity Society, and the "anthropological society in Southern California." One member of a discussion group apparently strengthened his leadership position in at least one of the organizations to which he belonged. This respondent reports as follows:

> The experience made me more courageous as a leader. I've recruited some good people for my committees.

It is possible, of course, that the increased friendship patterns of discussion participants might have had consequences for organizational memberships at a date later than that on which they were interviewed. However, on the basis of the data at hand, it would appear that the program had no immediate impact on the organizational memberships of the participants.

Summary

The lecture and discussion methods employed in the Ways of Mankind Series were compared in terms of (1) improvement in the ability to identify concepts of anthropology, (2) changes in certain attitudes, and (3) changes in several areas of behavior. With respect to the development of the ability to identify the anthropological concepts, no clear superiority was found for either of the methods. Given the conditions imposed on the study by the population involved and the measurements employed, the most justifiable conclusion that can be drawn is that there is no difference in the effectiveness of these methods when "learning" is used as the criterion of evaluation.

Contrary to the findings of some "experimental" investigations, in the present instance participation in the discussion method did not result in attitude changes that were significantly greater than those occurring as a result of participation in the lecture situations. In the present study, neither method had much effect on the mean or average attitudes of the groups investigated.

While the average attitudinal positions of the groups studied remained relatively constant throughout the experience, there is some evidence available that indicates that the positions of certain individuals were affected by the experience. The findings indicate that social pressures are operative in both the lecture and discussion situations; however, an analysis of the attitudes of those absent from the tenth meeting of the Series suggests that the pressures may operate in different ways in the two situations. The data suggest that "attitudinal deviants" are more likely to withdraw from a discus-

sion group than are those who occupy positions at or near the norm for their group. This tendency was not observed for the lecture situation.

Certain behavior patterns were apparently altered by participation in the Series. For example, approximately 30 per cent of the participants felt that the program had some effect on the type of reading materials they selected. Others stated that participation had led them to read more critically. No large differences were noted between lecture and discussion participants in these and other behavioral areas.

With respect to friendship and community involvement, large differences between the lecture and discussion participants were observed. The program definitely had more impact on the friendship and community involvement patterns of discussion members than of lecture participants. However, these results may not be attributable to the methods being compared. These findings may be the consequence of the location of the meeting places of the various groups and classes. All the lecture classes met at a university, while 11 of the 12 discussion groups met off the campus in what might be described as "community-centered" locations. Furthermore, it will be recalled that at the beginning of the program, discussion participants placed more emphasis on social expectations than did lecture participants. To some degree, the observations regarding friendship pattern development may be due to these original differences in expectations.

Footnotes

[1]See Chapter III, p. 25.

[2]See Table 19, Chapter V.

[3]For the Ways of Mankind participants the correlation between pre-test score and post-test score was 0.48.

[4]See Appendix A.

[5]The Authoritarian-Equalitarian Scale was not included on the post-questionnaire. This scale was included in the pre-questionnaire for descriptive purposes. No change in this attitude was expected as the result of participating in the program.

[6]The Authoritarian-Equalitarian Scale was not included on the post-questionnaire. This scale was included in the forms of the Attitude toward Adult Education Scale were employed. While the individual items were weighted in terms of a common base, and while the forms result in similar means when administered to college students, the adult participants may have interpreted the items differently than did the college group on which the scales were pre-tested. Additional administrations of these scales will be necessary before norms for adult populations are established.

[7]See Chapter V.

[8]*Ibid.*

[9]The Adult Education Scale was omitted from this analysis for reasons cited in footnote 6.

Chapter Eight

CONCLUSION

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While many of the findings presented in the preceding chapters of this report require additional substantiation before they can be used as a basis for administrative action, the research as a whole gives little comfort or support to those with strong convictions about the superiority of either the discussion or lecture method of teaching. The over-all impression that one obtains from these results is that the methods investigated are about equally effective.

Certainly the results call into question such opinions as those describing the lay-led discussion as "a pooling of ignorance where nothing is accomplished." Similarly, those who believe that the lecture method is unsuitable for sophisticated adult audiences will also have difficulty reconciling their opinions with the observations of this investigation. In general, the same kinds of people were attracted by both methods. These persons registered approximately equal satisfaction with the two types of presentation, and with certain exceptions, the two methods had about the same effects on the participants. It should be remembered also that a significant part of the "learning situation," namely the readings and recordings, were common to both populations.

It may be that certain individuals derive more benefit from one method than from the other. On this issue, the present research sheds little light, for this was not the central problem of our investigation. A detailed study of the relationship between method-effectiveness and personality factors may be in order, and would be required if answers are sought to questions about who benefits most from what type of educational format.

Possibly the most important consequences of the present study will be in terms of the suggestions that can be derived from it for further research in the adult education area. First, consider the matter of recruitment. In this regard, the present study confirms the findings of the N.O.R.C. and Kaplan investigations.[1] Liberal adult education courses like those represented by the Great Books Program and the Liberal Arts Programs offered by the University of California do not attract a cross-section of the American public. It is the professional, the educated, and the economically established who enroll in these programs. These are individuals who represent that portion of the population that is probably most liberally educated. What of the other segments of the population? Why do the programs that have been studied fail to attract the "blue-collar" worker, the individual with only a grammar-school education, or the economically marginal individual? If one objective of existing liberal adult education programs is to reach as wide a public as possible, a study of program appeal would appear to be in order.

A second general type of question might also be raised with respect to the objectives of liberal adult education. If such programs continue to attract participants who are for the most part highly educated, successful, and mature, can we realistically expect these programs to have major effects on the values, attitudes and behavior of these participants? The Ways of Mankind Series was a successful program, but it had only a limited effect on the participating population. Given the nature of that population, it would have been somewhat surprising if we had observed great changes in behavior, attitudes, or even knowledge. For example, consider the number of our participants who were successfully established professionals. They enrolled in one course which met for eleven two-hour sessions. We found that the course had little observable effect on their attitudes. The result is not unpredictable nor should it be discouraging. However, the finding does raise certain questions about the objectives of such programs. Is it reasonable to expect that for such participants adult education courses will increase the "ability to examine personal and social attitudes and values?"[2] Of course, we can have no objection to goals such as the one above. However, if objectives are to have utility for the development and administration of a program, they must be at least potentially attainable. Considerable

research could be devoted to the problem of developing realistic expectations for liberal adult education efforts.

With regard to teaching methodology, it is important to repeat that the findings of the present study must be substantiated before they provide an adequate basis for administrative decision. This research dealt with one course, at one time, in one location. While we believe that our results do have some degree of generality, they should be checked on other programs, at other times and in other places.

In addition to these general issues, a number of more specific problems, deserving of research, have been suggested by the present study. Throughout Chapters VI and VII, questions have been raised by the findings that could not be answered on the basis of the data at hand. For example, we have described a dilemma which may be inherent in the role of the adult education discussion leader. He must exercise control over the group process while permitting the group members to influence the course of the discussion. Is such a dilemma actually experienced by the leader? Can it be resolved?

As another example of the more specific problems raised by the present research, consider our findings with respect to attitudinal change. Only slight changes were observed. If the participants continued in adult education programs, would this trend continue? Does participation in liberal adult education programs have a cumulative effect on attitudes? The Great Books study presents certain findings that suggest that a cumulative effect may occur;[3] however, neither a survey which describes a population at a given point in time nor the study of a single course or program is adequate to answer questions about long-term processes. What is required is a longitudinal study, utilizing panel techniques, which follows the same sample of participants through several years of experience.

The Ways of Mankind Study employed a variety of methods to gather information on a large number of variables. We have been able to explore a number of areas, and, with respect to the particular program investigated, we have been able to reach a number of conclusions. These conclusions require further verification. In other areas, the present research has raised more questions than it has answered. The remedy for such a condition is more research.

We are convinced that the present study does make it obvious that the issues facing adult educators cannot be solved by dogmatic adherence to a particular school or philosophy of education. We know of no educational philosophy or frame of reference that receives incontrovertible confirmation from this research. It is our personal conviction that the growing adult education movement must develop a well-conceived and coordinated research program which will (1) provide administrators with vital operational

data, (2) provide for the realistic evaluation of existing programs, (3) supply basic information upon which new programs can be established, and (4) contribute basic knowledge to the psychology and sociology of education. The questions that have been asked but not answered in the present study can be seen as a documentation of the need for the establishment of coordinated, vigorous, and imaginative research programs as an essential feature of the total adult education effort.

Footnotes

[1]See Chapter III, p. 23.

[2]See Chapter I, p. 4.

[3]See Davis, *op. cit.*

Appendices

A. Review of Research

B. The Design of the Interview Sample

C. Attitude Scales Employed in the Study

D. Tables 1 A to 21 A

E. The Relative Effectiveness of Small and Large Lecture Classes

F. A Note on the Methods Employed by the Ways of Mankind Study

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REVIEW OF RESEARCH*

by

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Two major difficulties are encountered when one attempts to review the research literature devoted to determining the relative efficacy of lecture and discussion teaching methods. The first of these difficulties results from lack of agreement in the definition of the discussion method. The many variations and combinations of social interaction included under the label of discussion have been noted by Brunner (35), Buxton (38), Haigh and Schmidt (71), Stovall (170), Roseborough (150), and Ruja (152) to cite but a few. The most notable of these divergent discussion procedures are: (a) the recitation or question and answer technique, (b) the quiz section, (c) the lecture-quiz (vs. straight lecture), (d) the reading-quiz method, (e) "buzz" sessions, (f) seminars, (g) group-centered and leader-centered discussion groups, (h) discussion groups with "participatory" and "supervisory" leadership, (i) "permissively" and "directively" led discussion groups, (j) collections of persons who actually work as individuals, and (k) the "true" discussion method.

*Numbers in parentheses refer to the references listed in the bibliography following Appendix A.

Stovall (170), in search of a generally acceptable definition of the "group discussion method," suggests Ruja's (151) description of the discussion situation as:

> . . . interchange of question and answer (sic) among students primarily with the instructor playing a role . . . of moderator. The instructor roughly defines the area of discussion and supplies information when directly asked for it or when it illustrates a point already made or . . . poses a question relevant to the topic under consideration . . . Mostly the activity of the instructor consists in reflecting the content and feelings of the students' comments, relating these to one another and to a central topic, and promoting orderly sequences of discussion. (See 170, p. 256)

Put another way, Buxton (38) states that:

> . . . By true discussion is meant first, an emphasis upon genuine group interactions, with the instructor present and effective, but with the usefulness of discussion depending in large measure upon what the members of the group have to contribute to one another. A second defining characteristic of the true group discussion is that it deals, not with segmental questions, but with problems which themselves are unitary and to which each member of the group is (or should be) prepared in advance to contribute. (p. 185)*

Ideally, this review should be confined to research dealing with the composite type of discussion situation defined in the two descriptions above, i. e., where the primary exchange is between "students" and where the most active role played by the "instructor" is that of provocative moderator. Unfortunately, this would exclude numerous studies whose inferential value lies in their ability to further the integration of otherwise contradictory findings. Thus, in an effort to resolve some of the more apparent inconsistencies found in the most relevant research, we shall exclude from our presentation only those investigations primarily concerned with the "buzz" session [e.g., Phillips (140), McKeachie and Kimble (131)], and collectivities where the members actually work as individuals [e.g., Allport (2)].

In contrast to these inconsistencies, the literature reflects a general consensus regarding the definition of the lecture method. To be sure, as Stovall notes (170), there are:

> . . . differences in the lecture situation from one instructor to another and from time to time with the same instructor. The degree of formality, the opportunity for questions or comments from the students, and the manner and rate of presentation are but a few of the variables. About all that can be said is that the experimenters appear to have conceived the

*For treatments which effectively stress this defining characteristic see (9), (10), and (75).

> lecture to be a more or less continuous oral presentation of information and ideas by the teacher with little or no active participation by the members of the class. (p. 255)

The second difficulty encountered in reviewing the pertinent literature arises as a result of the use of different criteria of effectiveness. Here the difficulty can be overcome by categorizing the research in terms of the criteria employed. In this sense, three major classes of research can be identified: studies dealing with (a) the acquisition of information; (b) the retention of information; and (c) attitude change. Most frequently, the criterion of effectiveness is "achievement" or "learning of subject matter." In such studies both the acquisition and retention of information are often combined and utilized as a composite measure of achievement. Where this is the case, appropriate notations will be made throughout the following discussion.

I. *The Acquisition of Information*

Most of the creditable research has employed the amount of information acquired as the criterion of relative effectiveness. The majority of these studies find that the lecture and discussion methods, including modified forms of the "true" discussion method outlined above, are equally effective in terms of information acquired (15, 16, 30, 39, 45, 61, 90). In general, studies comparing teacher-centered with group-centered classes also have found no significant differences between these two approaches (28, 48, 52, 55, 64, 71, 95, 107, 130, 145, 165, 182). Again, Longstaff (119), comparing lecture with lecture-quiz methods, found no significant differences even when controlling for greater motivational effectiveness of either method. Where significant differences have been found, they have generally been in a direction indicating the superiority of the lecture method (e.g., 151, 167). Small but significant differences favoring the teacher-centered approach over the group-centered approach were also found in studies by Asch (5), Husband (91), and Guetzkow, *et al.* (69). While not statistically significant, the findings of Palmer (138), comparing lecture with lecture-discussion methods, and Remmers (146), using lecture and lecture-quiz groups, also support the greater effectiveness of the lecture method. In contrast, Davies, Gross and Short (47) and Jones (97) found slight differences favoring the discussion method over the lecture method. Finally, evaluating group-centered teaching, Faw (57) found a slight difference in favor of the group-centered class. This tendency is additionally supported by the findings of Flanders (59) and Perkins (139).

It is difficult to draw generalizations from such contradictory findings. This is certainly due in part to the inclusion of a number of divergent, but nonetheless relevant, "discussion" and "discussion-like" procedures while

utilizing only one criterion for evaluation, i. e., the acquisition of information. Another factor which may well be operative in the production of such inconsistent findings is that differential measures of achievement are frequently invoked, not only in studies evaluating different "discussion-type" procedures, but among those studies investigating the same or relatively similar procedures.

As an illustrative example, Haigh and Schmidt (71) addressed themselves to this problem within their brief review of the research dealing with the relative effectiveness of teacher-centered and group-centered approaches. Suggesting that

> . . . If getting a good grade depends on acquisition of knowledge, then this grade-motivation may induce the acquisition of knowledge independent of teaching method . . .

they go on to note that in the studies by Landsman (107), Smith and Johnson (165), Eglash (55), and Wispe (182), indicating no significant difference between teaching methods, . . .

> . . . it was necessary for the students to do well in examinations in order to get a good grade. In fact, in all but two, the mark on the final examination or the final grade itself was used as the criterion for the amount of knowledge acquired. The two exceptions (107, 165) used achievement tests but also had course examinations. We can probably infer positive transfer from studying for the regular examinations to performance on the achievement tests.

The one study suggesting superior results for the group-centered type of class (57) also used the course examination as a criterion. Since student grades were apparently dependent upon this criterion, the results involve the same ambiguity as those studies reporting no difference.

Only in the study by Asch (5) were student grades in the group-centered section *not* determined by examinations. Students were required to determine their own grades and were told that the final examination did not count toward their grade. In this study, the teacher-centered section did significantly better on a final objective examination.

These findings suggest that if students in a group-centered class are not "required to learn" via the grade-examination system, then they do not learn as much information as do students in a teacher-centered class.

However, even if we accept this finding from Asch's study, it does not rule out the possibility that some students may learn more in a teacher-centered class while others may learn more in a group-centered class. The study by Wispe (182) highlights the importance of interaction between student personality and teaching method [where he found that

> superior students performed equally well in either situation, whereas poorer students profited more from direction and structure in the class procedures. Cf. (38), p. 208.] (My brackets)

While in the foregoing investigations students were assigned arbitrarily to experimental and control groups and the findings were treated as group data, Haigh and Schmidt permitted their subjects to choose between a teacher-centered and a group-centered class. They concluded that under these conditions, when

> . . . the students are not required to learn subject matter by the examination-grade system, there is no significant difference between these two types of classes in knowledge of subject matter at the end of the term.

Thus, while not conclusive, these findings do tend to support the gross inference one is led to draw from the bulk of the other studies cited above, i. e., that, *generally, lecture and discussion methods appear to be equally effective with regard to the acquisition of information.* More importantly here, these findings serve well to illustrate how confusion may be compounded when simultaneously evaluating studies which have invoked different measures of achievement. Lastly, they suggest how greatly motivational and personality factors may influence the results of such studies, adding further difficulty to an already complex problem. These and other influential variables, seldom controlled in the research under review, will be examined more closely in a later section of this appendix.

II. *The Retention of Information*

This variable has received little attention in studies comparing the relative effectiveness of teaching methods. The few studies comparing lecture and discussion methods which have included this variable, however, reflect the general disagreement extant in the research on the acquisition of information. Thus, Jones (97) found that knowledge acquired in discussion classes was retained to a greater degree than that gained from lectures without discussion. His findings were substantiated by Bane (15, 16) and Rickard (147). In contrast, Spence (167) found just the opposite result while working with graduate students.

III. *Change of Attitudes*

A number of studies have established clearly that both lecture and discussion methods are capable of effecting changes in attitudes (for lecture see 42, 106, 143, for discussion see 8, 21, 92, 96, 99, 115, 116, 125, 149, 160, 172, 173). Comparative studies of the relative efficacy of these methods, however, are neither abundant nor entirely consistent in their implications.

Those dealing with attitude change are less convincing than those dealing with informational variables. The methodology and measurement techniques used in attitude-change studies are frequently subject to serious question. With these qualifications in mind, it appears that discussion methods are superior to lecture methods as a means of changing attitudes and behavior.

While Guetzkow, Kelly and McKeachie (69) and Johnson and Smith (95) found lecture and discussion methods to be relatively equal in effecting attitude change, the preponderance of other studies favors the discussion method in this respect. Maier (121, 122), in his thorough treatment of discussion techniques, suggests that peer-group pressures exert greater attitudinal influence than will arise in situations dominated by an instructor. Ruja's (151) classroom experimentation also supports this position. Kagan (98) found discussion methods to be significantly superior to lecture methods in changing students' attitudes toward Jews. An experiment by Preston and Heintz (142) demonstrated that participatory leadership was more effective than supervisory leadership as a technique in producing change of opinion in small discussion groups of college students. Hare (73) also found this relationship to hold for members of the Boy Scouts.

Perhaps the widest acclaim for the greater effectiveness of the discussion method as a means of changing attitudes has grown out of the work by Lewin and his associates, as well as those studies seeking to replicate and refine Lewin's earlier efforts. The research of Bavelas, Festinger, Woodward, and Zander (18), Guthe (70), Lewin (109,110), Lewin and Grabbe (112), Radke and Klisurich (144), and Willerman (180) indicated in most cases that the "group-decision" method was extremely superior to the lecture method in changing *behavior*. Bond (27), also comparing "discussion-decision" groups with those exposed only to a lecture, found the former markedly superior as a means of effecting a change in behavior. Seeking to repeat Lewin's research on eating habits, Levine and Butler (108) posed two questions: (a) Is learning enough to lead to change in group behavior?, and (b) Is group decision through discussion more effective than formal lectures in changing behavior? Again, the discussion-decision method proved more effective in changing behavior than the lecture method. While not significant, the change in the lecture group, as opposed to no change in the unexposed control group, was also in the direction advocated in the lecture.

It is important to note that the investigations discussed above did not involve a strict comparison of the relative efficacy of lecture and discussion methods as educational tools. As Brunner (35) has pointed out:

> . . . There is frequent confusion in adult education literature between the use of discussion as a purely educational device, as in the Great Books program, and its use to produce individual or social change. Though information that is educational in character plays a part in

> both situations, the objectives are quite different and strict evaluation of methods or techniques can be properly made only in terms of the objectives of the enterprise being examined. (p. 222)

It seems that much of the "confusion" in the literature stems also from the frequent failure of many reviewers to distinguish sufficiently between studies designed to measure differential changes in *attitudes* and those attempting to isolate various *behavioral* changes. In such cases the reader is often free to assume that the writer has either equated the two, or that studies measuring behavioral change also measure, and find comparable differences for, attitudinal changes. It appears further that this not uncommon occurrence has led to somewhat of an overstatement of the relative superiority of the discussion method over the lecture method as a means of changing attitudes. This seems to be especially true in the case of several reviews of the Lewinian experiments. Certainly this is not to imply that attitudinal modification may not accompany a change in behavior. Rather, it is to caution against the assumption that behavioral changes are always accompanied by attitudinal changes.

In any case, the implication in many reviews is that it is the discussion itself, rather than the discussion-decision process, which is instrumental in effecting the change in either attitudes or behavior. This is surprising since Lewin has made it quite clear that it is not simply "discussion" alone which he views as responsible for effecting such a change. Rather, he holds a change in group standards to be a key intervening variable; such change is said to be more effectively facilitated in the discussion situation. Indeed, it is Lewin's hypothesis that re-education can only come about with a change in the "culture" of the individual. That is, he must internalize the value system of the group of which he is part. (113)

Finally, Lewin suggests that it is not merely "discussion" which is likely to promote modification of group standards. Rather, since he holds acceptance of the group's "culture" to be greater if the person feels he is an ongoing member of the group, he maintains that a discussion group will be successful in this respect only if there emerges a "we" feeling which can facilitate such acceptance. Thus, while the discussion method is generally more conducive to the emergence of this condition than is the lecture method, Lewin finds that only a discussion situation which both heightens group identification and maintains complete freedom of the members is likely to produce an effective atmosphere for changing group standards and consequently for promoting both behavioral and attitudinal change. (113)

Lewin writes elsewhere that:

> a. The change has to be a change of group atmosphere rather than of

> single items . . . It must be deeper than the verbal level or the level of social formalities.
> b. It can be shown that the system of values which governs the ideology of a group is dynamically linked with other power aspects within the life of the group . . . Any change of the culture of a group is, therefore, interwoven with the changes of power constellations within the group.
> c. From this point of view it will be easily understood why a change in the method of leadership is probably the quickest way to bring about a change in the cultural atmosphere of a group. For the status and power of the leader or of the leading section of a group make them the keys to the ideology and the organization of the life of that group.
> d. From what has been said . . . it should be clear that lecture and propaganda do not suffice to bring about the necessary change. Essential as they are, they will be effective only if combined with a change in the power relations and leadership of the group. (114)

Thus, while Lewin provides still another rationale in support of the position which holds the discussion method to be superior to the lecture method as a means of changing attitudes and behavior, the qualifications surrounding his definition of the "effective" discussion group and its essential role in the production of such change also become clearly evidenced, and must be taken into account when evaluating the relative efficacy of the lecture and discussion methods.

More recently, additional evidence has appeared which may be brought to bear on this problem and which questions further the wisdom of assuming the discussion method to be the most effective means of attitudinal and behavioral change. In an effort to clarify several ambiguities inherent in the design of the Lewinian experiments and "to test the overgeneralizations that have, at times, been drawn from the dramatic results of (these) studies," Bennett (20), using lecture, "group-decision," and discussion groups, posed the following four hypotheses which were tested against the null statement of each and without reference to the effectiveness of the remaining factors:

> a. Group discussion, as an influence technique, is a more effective inducement to action than is the lecture method or no persuasion attempt at all. (Not verified)
> b. The process of coming to a decision regarding future action raises the probability of the execution of the action. (Verified)
> c. Where a decision is made, a more public commitment or indication of the decision is more effective in assuring the execution of such action than is a less public one. (Not verified)
> d. A high degree of group consensus on intention to act raises the probability that individual members of the group will execute the action

> above the probability of action by members of groups in which there is a low degree of consensus. (Verified)

She concluded that:

> . . . Two of the factors – group discussion as an influence technique and public commitment – were found not to be essential to the reproduction of previously obtained results (i.e., those found by Lewin and his associates).
>
> It was further shown that the combination of the two other variables – the process of making a decision and the degree to which group consensus is obtained and perceived – was alone capable of generating differences as large as those reported in the classic experiments of Lewin's co-workers.
>
> . . . The line of argument followed here indicates that results that have been associated with "group-decision" do not need the group-discussion technique. The factors of decision and objective or perceived group consensus alone have been shown to be as effective in increasing the probability of action as "group-decision" in the Lewinian experiments. . . . In the light of the findings here reported, . . . "group-decision" might profitably be redefined as "decision about individual goals in a setting of shared norms regarding such goals."

Cautioning the reader that her findings need not imply a blanket rejection of the usefulnes- of group discussion and public commitment, Bennett suggests that:

> The reports of both the Lewinian studies and the present one have referred to "group discussion" and "lecture" as simple, self-evident operations. Yet, there undoubtedly exist tremendous qualitative variations in both. Variables such as leadership technique, salience of subject matter, group cohesiveness, etc., would certainly be expected to affect the influence of the manipulations on subsequent action by participants.

Nevertheless, Bennett's findings place in serious question the necessity of discussion to reach a consensus which will register in action. Moreover, these results suggest that extreme caution should be exercised when evaluating its superiority over the lecture method as a means of effecting either behavioral or attitudinal modification.

IV. *Development of Abilities*

Another important dimension of the lecture-discussion debate, which has received some attention in the research, arises from the educator's concern for the student's development of various abilities, apart from the mere acquisition of facts. Stovall (170) notes that studies such as those done by

Bloom (26), Brinkley (33), Edmiston and Braddock (54), Ruja (151), and Ward (178) suggest that the discussion method appears to be significantly superior to the lecture method in the development of the ability to evaluate, synthesize, draw inferences, perceive relationships, and make application of the material learned. Kelley and Pepitone's (102) findings show that group-centered instruction appears to give an advantage in intellectual matters and that interpersonal attitudes are improved significantly by this approach. They point out, however, that because of the nature of their measures these may not be valid findings. Asch (5), employing the Minnesota Multiphasic Personality Inventory, found that a group-centered experimental class, which was initially and finally equal to control classes in degree of tolerance, as measured by the Bogardus Social Distance Scale, produced a greater number of students who improved their personal-emotional adjustment. Gibb and Gibb (64) found that group-centered instruction produced significant increases in ability to assume leadership. Gross (67), comparing non-directively and conventionally taught students, found a greater increase in self-insight in the former group, and Ruja (153) found the difference between groups as shown by Gross' data to be statistically significant. Lastly, the studies by Bovard (28), and McKeachie (130) found that group-centered teaching appears to develop superior ability to analyze and understand case material as presented in the film "Feelings of Rejection." Discounting possible criticisms of methodology and measurement techniques for the moment, it appears that the discussion method and its variants have a decided advantage over the lecture as a means of developing the several abilities suggested above.

V. *Possible Qualifications*

Several difficulties which hamper research in this area, as well as some of the variables upon which the interpretations of findings frequently hinge, have been noted above and elsewhere (35, 38, 71, 170). It is the purpose of this section to examine more closely these and other extraneous variables, seldom controlled in the research under review, which could conceivably exert some, if not considerable, influence over the relative effectiveness of both the lecture and discussion methods in producing such informational, attitudinal, and developmental modifications as those that have been discussed. To accomplish this we shall also consider a number of studies whose purposes were admittedly somewhat divergent from ours, but whose findings, nevertheless, are thought to be germane to the problem at hand. The inclusion of these studies is by no means exhaustive, merely suggestive, and their selection was based on their illustrative value. Because of the peripheral nature of their findings, no attempt will be made to explicate all their relevant implications. Rather, we shall endeavor to underscore only

those implications which question seriously the validity and reliability of the findings reported in earlier portions of this discussion, and which consequently render tenuous any generalizations drawn from these previous sections.

A. *General Critical Comments.* Zimbardo (185) suggests that the studies central to the focus of this review . . . "have, in general, suffered from a host of artifacts, and have been far from a 'solid' body of research." He adds that . . . "some of the obvious points on which they can be criticized are:

a. Sample – often small, non-random and unrepresentative.

b. The criterion measures used to test the efficacy of the methods are often "impure" and not valid or reliable.

c. Frequently control groups are lacking.

d. Often there is only one measurement taken which gives no indication of progress or permanence of effect.

e. Teacher – (a) His attitude and feeling toward the method are seldom taken into account; (b) his competence with each method is infrequently evaluated.

f. Student – Too often there is no mention of the fact that the student's personality, intelligence, and past experience with the method and the course, as well as his motivations and attitudes toward the teacher and method, all interact with the method and influence its success.

Also there are often individual differences evidenced within an apparently "successful" group using a given method, e.g., students in a lecture might score generally higher on a final examination than those in a discussion class when the two groups are taken as a whole, but individuals within either or both may vary in opposition to their respective group trend.

g. Confounding of the method with the size of the class, i.e., assuming discussion groups to be necessarily small and lectures to be large.

h. Frequent failure to control for extraneous variables which are covaried with the method, e.g., homework, tests, grades, etc.

i. Frequent failure to account for the significance of the method within the over-all school context, e.g., is it the only course of its kind and do the students have different expectations and anticipations toward it.

j. Often there is no independent assessment of the equivalence in the utilization of each of the methods, i.e., there is no check on the experimental variables."*

In an effort to expand and elaborate a portion of these general criticisms, more substantive comments will be made in the following sections. It might be profitable to note here, however, that the problem of instructor

*For a more comprehensive criticism see Buxton (38), Chapters 7, 8, 9. For other general criticisms see Miller (132), Dickens and Hefferman (51), Stovall (170), and Davies, Gross, and Short (47).

competence has not been adequately controlled in some studies (5, 23, 55, 57). Some assessment has been made in others by having the instructors use each of the methods in different classes (47, 69, 107). Control in still others has been exercised by letting the instructor use only the technique he could best employ and permitting this to be part of the definition of the method (52, 182). Observations and other records of classroom performance have been used as a check on these methods (69, 182).

It is important to note also that adequate evaluation of an experimental method of instruction requires sufficient use to permit noticeable effects. To date, some researches (182) may be lacking in this respect. Other studies (possibly in 134) may have utilized experimental teaching methods different from those used in the control groups.

B. *Consideration of the Effects of Some Specific Variables.*

1. Situational Variables:

a. Size. Buxton (38) suggests that:

> . . . in (much of) the research done to date (91, 119, 124, 146, 164, 167), there is no convincing evidence that optimum use was made of the smaller group which has been termed a quiz group or a discussion group by several of the researchers. Therefore only a size difference may have existed between groups known to have received lectures and groups labeled as being of some other kind. Research on the size-of-class variable (79, 90) has shown that size as such has not been a significant determiner of achievement as measured. We may infer that size of class, like time as a variable in physical processes such as the rusting of wire, is important only insofar as it allows other variables to have a greater or lesser effect. To complete the analogy, it is necessary that researchers comparing lecture and quiz or discussion techniques specify what is done, other than to vary the size of classes. They will need to specify the objectives sought and the means to be used to measure achievement of these objectives. (p. 142.)

Davies, Gross and Short (47) also concluded that class achievement was not significantly related to size, regardless of the instructional method employed.

In contrast, however, the "limiting" effects also suggested by Buxton are clearly illustrated in several other studies. The research by Hare (73) and Jacques (92) raises serious doubts about the quality of discussion possible in groups larger than twelve. South (166) has shown that the efficiency of groups of differing size depends upon, among other things, the type of problem the group is trying to solve. More recently, Hemphill (76) concluded that, to some degree, size conditioned leader behavior within the limits of his

methodology. Bass and Norton (17) found that the relative stratification in a group tended to increase with increases in discussion group size. Their findings are supported by those of Bales, Strodtbeck, Mills and Roseborough (14) who found that the difference between the participation of the most talkative and least talkative persons increased as the size of the group increased from three to ten men. With further regard to participation and size, the work of McGinnies and Vaughan (128) and that of McGinnies and Altman (127) shows that with non-directive discussion leadership the rate of recruitment of participants into the discussion is faster in small than in large groups, and the function is steeper with groups having a well-defined attitude toward the stimulus (126). Miller (133), in his study of the effects of size on decision-discussions, found a negative correlation between size and the opportunity to talk, as well as between size and group cohesiveness. While a positive correlation existed between size and clique formation, increasing size had no effect on the quality or quantity of decisions in groups of from three to twenty persons. Lastly, the results of Gibb's work (63) strikingly support his hypothesis that the idea-productivity of a problem-solving discussion group will vary as a negatively accelerated increasing function of its size.

Judging from the findings above, it would seem that Buxton tends to understate the importance of size by assigning it primarily a "limiting" role in the production of group achievement as well as in its effects on other variables operating in such situations. The interdependence and interaction of those variables which apparently *are* affected by size is distinctly evidenced above. Clearly the question of independent variation is by no means a closed one in the research under review. Indeed, to the degree to which size affects other variables under given conditions it must be accounted for, and it appears that size differentially affects these variables under a number of varying conditions. Thus, while Buxton's conclusion, i.e., that size itself is not a significant determiner of achievement, finds general support in research, these same studies strongly suggest that the "limitations" he alludes to may frequently be sufficient to alter seriously the degree and quality of actual achievement, utilizing a given method of instruction, as compared to the potential achievement in the same group where a situationally defined optimal size was employed. On this view, then, the findings of studies comparing the relative efficacy of lecture and discussion methods must be taken as tentative only, where the effects of size are not known, i.e., where size is either not controlled for or where it is held constant, and/or when its "limiting" effects on other variables are not determined (47, 72, 142). Finally, this conclusion holds with regard to the effects of other variables, and is borne out in the following discussion as the interaction and interdependence of these variables becomes more clearly evident.

b. Task Problem. Deutsch (49) found that the quality of group process was determined to a great extent by differences in task structure. Comparing mathematical problems with human relations problems he found that in the former there was more individualized effort, less coordination of efforts among the group members, fewer attempts at communication, and more communication difficulties. A study by Shaw (161) also revealed major differences in group process dependent upon the task to be accomplished.

2. Social Structural Variables.

a. Authority Relationships. Heyns (78) found a greater incidence of supportive behavior in positively led discussion groups and of opposing contributions in negatively led groups. Acceptance of such behavior was related in the same manner. Wispe (182) found that students preferred directively led groups. In contrast, Allport's (1) findings indicate a student preference for informal, permissive, and friendly discussion groups, as did those of Gross (67). Evans (56) found greater therapeutic gains in directively led groups, while Faw (57) found that his students preferred the non-directive approach. Bovard (29, 30) found that affectivity was greater between members in "group-centered" groups and that members of "teacher-centered" groups were more susceptible to opinion change. Simpson (162) found that leaders who were neutral toward the issues considered in small discussion groups tended to influence their groups less as measured by changes in attitudes of group members toward those of their leaders. Lippitt and White (117, 118) have shown the interdependencies of leadership role, group composition, group history, and membership personality structure. McGinnies notes (126) that participation, spontaneity, and recruitment into the discussion might all be systematically altered by employing different types of leadership.

With further regard to student preference, Remmers (146) found that students in small groups liked their instructors better. He views this as a halo effect resulting from better acquaintance. As mentioned earlier, this preference had no apparent effect on the superiority of the instructional method. These results are substantiated by those of Haigh and Schmidt (71) where students were permitted to choose the method and where the examination-grade system was not employed in the group-centered class. While the studies of Bovard (28), Faw (57), and Wispe (182) suggest that students in group-centered classes like each other and the method better, those of Eglash (55), Milner (134), and Wispe (182) found a preference for more directive instruction. Speaking of the interactions of various variables, Buxton (38) suggests that:

> . . . Remmers (146) shows, for example, and Holland's data (80) suggest, that the ratings students make of an instructor depend *partly* on whether

> he is handling lectures only or discussions only for them. We may interpret this as an effect of instructor personality such that it differentially influences the operation of another variable, class size or teaching technique. (p. 143)

b. Group Dynamics and Dimensions of Syntality. In recent writings by Bales (12), Bales and Strodtbeck (13), Hare, Borgatta, and Bales (74), and Cartwright and Zander (40) about group behavior, the small group has been regarded as a dynamic system of action where disequilibrium of activity in one area may have repercussions in other areas of activity. Sterling and Rosenthal (169) found a change in leaders and followers with different phases of the group process. Bales and Strodtbeck (13) also found phases in group problem-solving. Similar results were found by Heyns (77), and Plank (141).

> "Syntality" has been described by Cattell (41) as an abstract entity which: . . . defines for the group precisely what "personality" does for the individual. It is, therefore, that which determines the organism's reactions when the stimulus situation is defined.

Although not consistently conceptualized in the literature, such variables as "cohesiveness," "solidarity," "salience," etc. are viewed by the "Group Dynamicists" as dimensions of syntality. A few such concepts have received research attention. Back (11), using differences in the saliency of instructions to establish low and high-cohesion groups, found that members of highly cohesive groups tried harder to reach agreement, influence their partners on controversial issues, and were relatively more willing to accept their partners' views. Schachter, Ellertson, McBride, and Gregory (158) found no necessary relationship between cohesiveness and productivity; however, highly cohesive groups were somewhat more successful in lowering a member's rate of production. Manipulating the solidarity dimension, Festinger and Thibaut (58) concluded that both communications to persons holding extreme opinions, and the actual change toward uniformity of opinion in the group as a whole, tended to increase with increasing solidarity. Using "stooges," Schachter (157) found greater rejection of deviates in high-cohesion groups as well as more communication addressed to such persons. To the degree to which salience of group membership is a dimension of syntality, Kelley (101), and Kelley and Volkart (104) found that subjects assumed to be low in salience showed greater immediate change of opinion when confronted with communications contrary to group norms (see also 100), and showed continued change and greater acceptance of these communications after a three-day delay period. Duncan and Krietlow (53) also found highly cohesive or culturally homogeneous neighborhoods less likely to adopt new attitudes and techniques.

3. Personality Variables.

a. Authoritarianism. Following Lippitt and White (117, 118), Sanford (154, 155) studied the effects of authoritarian and equalitarian leadership on groups containing varied numbers of authoritarian and equalitarian members. His findings have been succinctly summarized by Gibb (62):

> . . . In summary, it is found that authoritarians and equalitarians differ in the kind of leadership they demand and in their responses to leader behavior. Authoritarians prefer status-laden leadership, strong authority and direction on the part of the boss. Toward weak leaders they express open hostility. Equalitarians, on the other hand, are able to accept strong leadership if the situation demands it, but they have no need for powerful authorities. Authoritarians care little for personal warmth in their leader but they do demand that he contribute to their locomotion toward group and individual goals. Equalitarians are inclined to evaluate leaders in terms of their "human relations" behavior and their group process, rather than goal orientation. The possibilities of frustration and conflict are clear. Authoritarians are dissatisfied and uncomfortable under a non-directive leader. A group of equalitarians could be expected to go into a decline under a rigid and directive leader. (p. 901)

Gross (68) notes that studies attempting to determine the effects on learning of "authoritarian" and "equalitarian" social climates have yielded contradictory findings (34, 43, 111, 181 and those cited in Brim 32). As a possible explanation for these inconsistent findings, he suggests that:

> . . . If we assume that subordinates work most effectively in a social climate in which their superordinate conforms to their expectations for his behavior, then we can assume that students who hold an "authoritarian" role definition for the behavior of their teacher will work harder in an "authoritarian" environment and that students who hold a "democratic" role definition for their teacher's behavior will work harder in a "democratic" environment. The variable of the congruency between role behavior and role expectation could account for these contradictory findings.

b. Correlates of Preference for Instructional Methods. Ashmus and Haigh (7) report that students having past experience with both group and teacher-centered instruction expressed no significant preference for either. Those having no experience with group-centered methods significantly preferred the teacher-centered approach. Wispe (182) found "personally insecure" persons unfavorable toward permissive techniques; "independent" students favorable toward this approach; and "satisfied" persons favorable toward both methods. Ashmus, Bedrosian and Wiseman (6) reported the following personality differences between students choosing these two methods:

(1) Students choosing a group-centered class are more flexible in problem-solving as measured by the Einstellung Test (Wiseman).
(2) Students choosing a group-centered class were better able to cope with inconsistencies and ambiguities in reproducing stories (Bedrosian).
(3) Students choosing a teacher-centered class were more stereotyped and had less insight in describing their self-picture (Ashmus). (71, p. 300)

Inferentially, these findings are in accord with Gross' (68) view of the "authoritarian-equalitarian" dilemma expressed above.

In his study of adult discussion groups, Kaplan (99) found that participants in the discussion groups with less than average education desired strong, directive leadership by the discussion leader. In contrast, the better educated resented a leader who dominated the group. Palmer (138) indicates that above-average intelligence may be responsible for the better response to the lecture method which he found among Air Force Primary Pilot Training students. Morin and Potter (136) noted that group discussion was regarded as time-wasting futility by those from cultural backgrounds where the society is highly structured and hierarchical arrangements are clearly defined.

c. Correlates of Participation. Smith and Dunbar (164) discovered that classroom discussion participants scored higher than non-participants when measured for intelligence, quality of adjustment, and critical thinking. McGinnies and Vaughan (128), investigating biographical determiners of participation in group discussion, found that:

> . . . The reliable predictors, grouped into three general categories, were: *socioeconomic status,* i.e., education, income; *familiarity with the discussion area,* i.e., self-rating on extent of information about mental health problems and concepts, number of mental health films previously viewed; and *group affiliation,* i.e., status as a club official, attendance record at meetings, extent of acquaintanceship in the group, number of memberships. In each instance, a high or positive rating was associated with a tendency to participate in group discussion.

In a further analysis, they found that the predictive power of education and leadership alone was far in excess of chance probability in identifying actual participants and non-participants.

d. Age. While Houle (82) showed that attitudes of adults may be changed, at least to some extent, Lorge (120) found that attitudes of older age groups had a tendency to become more firmly fixed and were less amenable to modification than were those of younger age groups, when intelligence was controlled.

4. Additional Dimensions of Influence and Judgment.

a. The Credibility and Prestige of the Communicator. Several studies have investigated the effects which the credibility of the communicator may have in changing opinions. Hovland and Weiss (89) found that while there was no difference in the amount of information gained from high, low, and neutral credibility sources, opinions changed in the advocated direction immediately after the communication and to a greater degree among those listening to a high credibility source. After four weeks, however, significant decreases occurred in the agreement with the high credibility source, while significant increases with the low appeared. In a following study, Kelman and Hovland (105) concluded that this "sleeper effect" has a tendency to occur when no reminder is made of the source of communication. (See also Weiss 179.) It appears also that while there is a tendency for positive and credible sources to effect greater initial opinion change, both positive and negative communications are remembered somewhat more than neutral ones. The findings of Hovland and Pritzker (88), using highly acceptable communicators, show a progressive increase in opinion change with increasing degrees in the amount of change advocated. These results are substantiated by the work of Goldberg (65) and French (60). Another study by Hovland, Harvey, and Sherif (85) suggests that when some ambiguity about the communicator's credibility exists, and when there is also deep involvement with the issue on the part of the subject, increases in resistance vary proportionately to increases in the attempts at change. In contrast, as in the study by Hovland and Pritzker reported above, they found that the greater the discrepancy in advocated change, the greater the effect when using high credibility sources and issues of lower involvement. Likewise, Zimbardo's findings (184) indicate greater opinion change with greater discrepancies, when using close personal friends, even when the importance of the subject's opinion is pointed out by the experimenter.

b. The Nature of Appeals. Another important question in the study of attitude change is the relative effectiveness of "emotional" and "rational" appeals. This has been debated both in (24) and outside the field of adult education. It has been noted above that both can be effective under varying conditions. A further question centers on the relative effectiveness of presenting one or both sides of an argument. Studies by Hovland, Lumsdaine and Sheffield (87) and Houle (82) indicate that a negative communication must appear to be fair to be effective among Armed Service personnel. Jarrett and Sherrifs (93), studying the effects of propaganda, debate, and impartial presentation, found that with direct argument in favor of one rather extreme attitudinal position there was an insignificant change in both directions, i.e., some strongly opposed subjects became more resist-

ant while others altered their position. In the debate situation, males tended to move in the direction of their own bias while females did not react similarly, i.e., many females favored the male biases. As a result of the impartial presentation, males became more moderate in their opposed position while females manifested no unidirectional trend.

A study of attitude change and authoritarian personalities by Wagman (176) affords an excellent example of how the interaction of variables which are seldom controlled may produce very different results. He found that while there was a reduction of prejudice among non-authoritarian persons when the communication contained facts which militated against stereotypical beliefs, authoritarians became more prejudiced. When the communication was authoritarian, either positive or negative, authoritarians changed attitudes in the suggested direction, i.e., either more or less prejudiced. Non-authoritarians, however, became less prejudiced in both cases.

Thistlethwaite and Kamenetzky (171) studied the problem of attitude change through refutation and elaboration of audience counterarguments. Using both Air Force recruits and high school students, four experimental situations were established: (a) refutation with elaboration of counterarguments, (b) refutation without elaboration of counterarguments, (c) no refutation with elaboration, and (d) no refutation without elaboration. Comparison with matched control groups, both immediately and twenty-one days after the presentation, showed each of the experimental procedures to be effective. Among high school students, refutation was less effective than no refutation, but not significantly so. Comprehension of the intended conclusion was greater for both samples with refutation, although the difference was only significant for the high school students. The attitudes of the recruits were more effectively changed with no refutation, while there was no significant difference in this case for the high school students. The refutation situation without elaboration tended to be more effective than programs presenting elaborations. Programs without elaborations generally tended to be more effective than those with elaboration. Audience members discounting the communication more were less likely to change their attitudes in favor of the communication. Lastly, audience members evidencing greater comprehension of the communicator's conclusion tended to be more influenced by the communication.

Cromwell (46), studying the persistency of the effect of argumentative speeches, found that speeches rated as strongly effective produced significant changes in attitude toward the side advocated by the speaker. While there is a regression toward their original attitudes thirty days later, there is evidence that those changing in either direction are still influenced by the speeches. Finally, the findings also indicate that the greater the immediate effectiveness, the stronger the influence after thirty days.

c. Attitude Change With the Discussion of Films. The studies of Smith (163), and of McGinnies, Lana, and Smith (129), showed no measurable opinion change after presentation of a film in situations both with and without a following discussion period. In contrast, Mitnick (135) found both film-alone and film-discussion groups to evidence significant reductions in ethnocentrism. This effect was greater in the discussion groups than in non-discussion groups for tolerant subjects. Among prejudiced individuals however, attitude change was less in the discussion groups. McGinnies (126) suggests:

> Opportunity for discussion apparently detracted from the effects of the film by allowing these persons to re-affirm the ethnocentric convictions that they held originally.

Mitnick found that stability of attitude was also related to the experimental conditions. One month later, discussion participants had maintained their initial changes while film-alone group members had significantly regressed toward their original opinions. This was also true even of passive discussion group members. Less prejudiced persons gained more information from the film. This was also true of those who voluntarily participated in the discussion. With regard to this latter point, McGinnies and Altman (127) provide evidence that there is greater discussion spontaneity in groups composed of persons with either positive or negative attitudes toward the film presented, as opposed to those holding relatively neutral ones. Lastly, the retention of information gained from the film was greater one month later for tolerant persons than for more prejudiced ones.

Horowitz *et al.* (81), studying the induction of forces in discussion groups, found agreement or disagreement with an action in the group significantly related to one's attitude toward the person who is perceived as the source of the action. In addition, each person in the group finds "allies" and "enemies" in the group with regard to his judgment of these acts, and these "allies" and "enemies" are determined by the subject's attitude toward the others in the group. If attempts to influence may be interpreted as "acts," this finding appears to support McGinnies' suggestion above that the opportunity for discussion allows persons to re-affirm their original convictions, i.e., not only does one have an opportunity to express his own opinion, but he may find sufficient support to resist successfully attempts to influence him.

d. The Effects of Groups, Discussion, and Prestige on Judgments. Munsterberg (137) found that individual judgments of the numbers of dots on cards were more correct after group discussion than before. Burtt (37), however, failed to confirm these results when repeating Munsterberg's study. Given moral conflict situations where a decision was expected, the subjects of Bechterew and de Lange (22) arrived at individual solutions after discus-

sion which included more relevant facts in the case and which were more similar to each other as well. Shaw (161), studying the effectiveness of group problem solving, concluded that the group is superior to individuals in its ability to reject incorrect ideas. Studying contributions of the discussion leader to the quality of group thinking through the effective use of minority opinions, Maier and Solem (123) found that the discussion leader can substantially increase the quality of group thinking simply by providing an individual who has a minority opinion sufficient opportunity to express it.

Jenness (94), investigating the role of discussion in changing opinion regarding a matter of fact, found that discussion, as such, is not effective in changing attitudes unless the participants become aware of differences in opinion. He also found that while the accuracy of judgment was not improved by discussion, and, in fact, the average error of the individual was increased, the typicality of opinion was increased and the number of individuals who did not change opinion was negligible.

Cole (44) studied "rational arguments" and "prestige-suggestion" as possible factors influencing judgment, and concluded that, when no justification was given by a prestige figure for his argument, the influence of "prestige-suggestion" was negligible. He suggests that the positive influence of "prestige-suggestion" reported in many earlier studies may have been partly a result of an implicit assumption by the subjects that, given an opportunity to justify his position, the authority could do so to their satisfaction.

Lastly, Schonbar (159), investigating the modification of judgments in a group situation, tested the Allport hypothesis on social conduct, i.e., regression of extreme judgment toward the center of the scale as a result of judgment in groups, while intermediate judgments are little affected. In contrast to this hypothesis, she found no constriction in the range of socially rendered judgments.

VI. *Summary and Conclusions*

In brief summary, this review of research indicates a general lack of agreement as to the relative efficacy of the lecture and discussion methods, whether the criterion is acquisition of information, retention of information, or attitude change. In terms of sheer mass of evidence it would appear that the methods are equally effective if the criterion is acquisition of information, but that results favoring discussion procedures are obtained when the criterion employed is the retention of information. The discussion method also seems superior to the lecture method as a means of changing attitude, as well as being more effective in the development of abilities and "desirable" interpersonal relationships in the classroom.

It is important to keep in mind, however, that these inferences assume comparability for the studies from which they are drawn. As we have seen,

there is little evidence to warrant such an assumption. Indeed, in view of the general lack of agreement and frequent failure to control a number of variables which may have seriously altered the findings, one must exercise extreme caution in evaluating this divergent body of research.

Perhaps of greater import here is the conspicuous lack of research at the adult education level. Not only has most of the research been done in a college situation, but the youthfulness and general grade-orientation of the majority of samples make it difficult to apply the findings that are available to the adult education situation.

Finally, the general area lacks a theoretical framework which integrates various research findings, resolves the inconsistencies that exist, and provides a basis for translating what has been found in one situation to other educational settings. This holds for the several sub-areas that have been reviewed. For example, in the area of attitude change, a large number of highly sophisticated studies have been found; however, despite the integrative efforts of Lewin, Festinger, and Hovland, no general framework exists within which particular results can be translated unambiguously to the present research situation. Thus, while we have at hand numerous pieces of information suggesting problems that can be explored in the present instance, we lack an empirically based frame of reference within which the entire research problem can be formulated.

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APPENDIX B

The Design of the Interview Sample

The procedures used in selecting the interview sample were different for the various sub-populations involved. It is, therefore, convenient to describe these procedures independently.

1. *Discussion Groups.* It seemed desirable to have each of the 12 discussion groups represented in the interview sample. Therefore, the total discussion population was first stratified according to group membership. Next, six members were randomly selected from each group. Finally, for each group the six members falling in the sample were randomly assigned to one of three interviewing patterns: two to be interviewed only at the beginning of the program; two to be interviewed only at the end of the program; and two to be interviewed at both times.

2. *The Large Lecture Class.* For the large lecture class, the basic sample of 63 participants was selected randomly from those enrolled. Then these 63 participants were randomly assigned to one of the three interviewing patterns described above.

3. *The Small Lecture Classes.* Because of the relatively small total number of persons enrolled in the small lecture classes, only one interviewing pattern was employed in this instance. Twenty-five participants were randomly selected and interviewed both at the beginning and the end of the Series.

The total design, then, was as follows:

Interview Pattern	Sub-population		
	Discussion Group	Large Lecture Class	Small Lecture Class
Interviewed at beginning of program..	24	21	—
Interviewed at end of program.....	24	21	—
Interviewed at both beginning and end of program	24	21	25

The post-interview sample was expanded to include 25 participants who were members of two particular discussion groups. The first of these groups maintained a high level of attendance throughout the program, and in the opinion of the group's observer, was extremely successful in maintaining a high level of interest and active participation. In the second group, attendance declined markedly, the discussion leader was most discouraged by the situation, and a number of participants leveled rather severe criticisms at the program. This special interview sample of 25 was selected in the hope that the information they could provide would further our understanding of the factors associated with successful discussion procedures.

APPENDIX C

Attitude Scales Employed in the Study

In order to measure the effect of the Ways of Mankind program on the attitudes of the participants, the pre-questionnaire included fifty attitude statements, divisible into six attitude "scales." These items were arranged in random order so as to minimize the respondent's recognition of what attitudes were being measured. The respondent was asked to respond to each statement in terms of a scale ranging from +3 (I agree very much) to –3 (I disagree very much). On the basis of these responses, a score was computed for each individual on each of the six attitude scales.

1. *The Two Ethnocentrism Scales.* The attitude items used in this research included a sample of 13 items from the Ethnocentrism Scale discussed by Levinson.[1] The original scale consisted of 34 items divided into three subscales: "the Negro subscale," "the minority subscale," and "the patriotism subscale." The 13 items used in the present study were drawn from the minority subscale (7 of the original 12 items were employed) and the patriotism subscale (6 of the original 10 items were used). In general, high scores on these subscales are indicative of an "ethnocentric" or "prejudiced" attitude toward minority groups, whereas low scores identify the "unprejudiced" or "tolerant" individual. In the present instance, items from the two subscales were treated separately, with each individual receiving a score on each sub-set.

2. *The Authoritarian-Equalitarian Scale.* Like the ethnocentrism scales, the initial authoritarianism scale was developed by the authors of the *Authoritarian Personality.*[2] One of the original authors, R. N. Sanford, later constructed a shorter scale, which he termed the authoritarian-equalitarian scale, but which purportedly measures the same attitude dimension. This shorter form, consisting of 7 items, was incorporated within the pre-questionnaire.[3]

Possibly the best brief description of the purpose of measures of authoritarianism is that given by Riecken, "The purpose . . . is to measure the degree to which an individual believes in rigid obedience to constituted authority, strict discipline, and the use of force and compulsion in social situations."[4] High scores on the scale indicate an authoritarian orientation, while low scores are indicative of equalitarianism.

3. *The Democracy Scale.* In conjunction with his study of the volunteer work camp, Riecken developed a fifteen-item democracy scale. Ten of these 15 items were used in the present study. Riecken describes the scale as follows:[5]

> They (the items) are all concerned with what might be called the ideology of "democratic group process," specifically such topics as decision

through consensus, equality of status for leader and members of a group, loyalty to democratic means for all ends, consistency of belief with behavior, and placement of higher value on group decision procedure than upon mechanical or economic efficiency in action. These and similar issues have been identified numerous times as essential components of a "democratic" perspective on group discussion.

A high score on this scale indicates that the individual has an "undemocratic" perspective regarding group process; a low score is interpreted as indicating a "democratic" point of view.

4. *The Intolerance of Ambiguity Scale.* In connection with their continued studies of authoritarianism, Webster, Sanford and Freedman isolated nine items that pertain to the degree of tolerance an individual has for an unstructured stimulus or situation.[6] Eight of these nine items were included in the pre-questionnaire.[7] High scores indicate that the individual is intolerant of unstructured, undefined, or ambiguous situations or stimuli.

5. *The Attitude toward Adult Education Scale.* In order to determine the effect of participation in the program on the participants' attitudes toward the general area of adult education, a scale was developed in connection with this study. The specific technique known as the method of successive interval scale construction was employed to select and assign weights to the 12 items that were incorporated into the pre-questionnaire.[8] High scores on this scale indicate a favorable attitude toward adult education.

The authoritarian-equalitarian scale was employed only in the pre-questionnaire; all other measures appeared on both the pre- and post-instruments. Two forms of the adult education scale were devised. Both forms were pre-tested on a college undergraduate population, with the pre-test results yielding approximately equal average scores for the two forms. For the remaining scales, identical items were used in both the pre- and post-measurements.

Footnotes

[1]Daniel J. Levinson, "The study of ethnocentric ideology," Chapter IV in T. W. Adorno, *et al., The Authoritarian Personality,* New York: Harper and Bros., 1950.

[2]Adorno, *et al., op. cit.,* Chapter VII.

[3]See Joan Eager and M. B. Smith, "A note on the validity of Sanford's authoritarian-equalitarian scale," *Journ. of Abnormal and Social Psychology,* Vol. 47 (1952), pp. 265-267.

[4]Henry W. Riecken, *The Volunteer Work Camp: A Psychological Evaluation,* Cambridge, Mass.: Addison-Wesley Press, Inc., 1952, p. 33.

[5]Riecken, *op. cit.,* p. 34.

[6]H. Webster, R. N. Sanford and M. Freedman, "A new instrument for studying authoritarianism in personality," *Journ. of Psychology,* Vol. 40 (1955), pp. 73-84.

[7]The item eliminated was as follows: "It is annoying to listen to a lecturer who cannot seem to make up his mind as to what he really believes." It was felt the participants in lecture groups might respond to this item in terms of their reactions to their particular instructor, rather than in terms of a more general attitude. For this reason, the item was eliminated.

[8]See A. L. Edwards, *Techniques of Attitude Scale Construction,* New York: Appleton-Century-Crofts, Inc., 1957, Chapter V.

APPENDIX D

TABLE 1 A

Marital Status of Participants

Marital Status	Per cent in Each Category		
	All Participants	Discussion Participants	Lecture Participants
Single	15.8	14.6	17.0
Married	69.7	64.8	74.9
Separated	1.7	2.4	0.9
Widowed	3.1	4.0	2.1
Divorced	9.7	14.2	5.1
Total	100.0	100.0	100.0

TABLE 2 A

Age Distribution of Participants

Age	Per cent in Each Age Group		
	All Participants	Discussion Participants	Lecture Participants
30 or Younger	17.4	17.0	17.8
31-40	41.2	46.0	36.1
41-50	28.0	27.0	29.1
51-60	10.4	7.5	13.5
61-70	2.6	2.5	2.6
71 or Older	0.4	0.0	0.9
Total	100.0	100.0	100.0

TABLE 3 A

Religious Preference of Participants

Religious Preference	Per cent in Each Category		
	All Participants	Discussion Participants	Lecture Participants
Catholic	4.0	1.6	6.5
Jewish	46.0	48.8	43.0
Protestant	26.5	23.6	29.6
Other	5.1	6.6	3.5
None	18.4	19.4	17.4
Total	100.0	100.0	100.0

TABLE 4 A

Occupational Status of Male Participants Who Are in the Labor Force

Occupational Status	Per cent in Each Category		
	All Male Participants	Discussion Participants	Lecture Participants
Professional	5.5	63.9	67.0
Manager, Operator, or Proprietor	4.3	20.5	27.7
Clerical	1.1	0.0	2.1
Sales Workers	7.4	13.3	2.1
All Others	1.7	2.3	1.1
Total	100.0	100.0	100.0

TABLE 5 A

Magazines Most Frequently Mentioned As Being Read Regularly (Pre-Interview Sample)

Magazine	Per cent Mentioning		
	All Interviewees	Lecture Interviewees	Discussion Interviewees
1. Time	43.6	46.8	39.6
2. Life	33.6	38.7	27.1
3. Newsweek	18.2	19.4	16.7
4. Reader's Digest	18.2	16.1	20.8
5. New Yorker	17.3	24.2	8.3
6. Ladies Home Journal	14.5	16.1	12.5
7. Saturday Evening Post	12.7	21.0	2.1
8. Look	12.7	14.5	10.4
9. National Geographic	12.7	22.6	0.0
10. Saturday Review	11.8	17.7	4.2
11. Harpers	11.8	14.5	8.3
12. Reporter	11.8	16.1	6.2
13. Holiday	8.2	9.7	6.2
14. Atlantic Monthly	7.3	6.5	8.3
15. McCalls	6.4	6.5	6.2

TABLE 6 A

Dewey Decimal System Classification of Books Currently Being Read or Recently Completed by Participants (Pre-Interview Sample)

Classification	Per cent of Titles in Each Category		
	All Interviewees	Lecture Interviewees	Discussion Interviewees
Fiction	48.5	52.9	42.6
Non-fiction	51.5	47.1	57.4
1. Philosophy	6.6	2.9	11.5
2. Religion	4.5	3.8	5.5
3. Social Science	9.9	12.5	6.6
4. Philology	0.9	0.4	1.6
5. Pure Science	3.1	4.2	1.6
6. Useful Arts	4.5	1.3	8.7
7. Fine Arts	1.9	0.8	3.3
8. Literature	4.3	3.7	4.9
9. History	15.8	17.5	13.7
Total Titles Listed	423.0	240.0	183.0
Average No. of Titles Listed by each Respondent	3.8	3.9	3.8

TABLE 7 A

Television Programs Most Frequently Mentioned As Being Watched Regularly by Participants (Pre-Interview Sample)

Program	Per cent Watching Regularly		
	All Interviewees	Lecture Interviewees	Discussion Interviewees
Playhouse 90	30.0	30.6	29.2
Steve Allen	13.6	9.7	18.7
Meet the Press	10.9	11.3	10.4
Ed Sullivan	10.0	9.7	10.4
Oscar Levant	9.1	4.8	14.6
Alfred Hitchcock	8.2	6.5	10.4
The Chevy Show	8.2	6.5	10.4
Person to Person	7.3	11.3	2.1
Gunsmoke	6.4	9.7	2.1
Perry Mason	6.4	6.5	6.2

TABLE 8 A

Age and General Satisfaction with the Program

Age in Years	Post-Questionnaire Respondents: Discussion — Highly* Satisfied N	Discussion — Highly* Satisfied %	Discussion — Not Highly Satisfied N	Discussion — Not Highly Satisfied %	Lecture — Highly* Satisfied N	Lecture — Highly* Satisfied %	Lecture — Not Highly Satisfied N	Lecture — Not Highly Satisfied %
49 and Older.....	15	88.2	2	11.8	24	72.8	9	27.2
39 to 48.....	26	65.0	14	35.0	29	69.0	13	31.0
29 to 38.....	41	68.3	19	31.7	24	72.7	9	27.3
28 and Younger..	13	72.2	5	27.8	8	66.7	4	33.3
Total	95	70.4	40	29.6	85	70.8	35	29.2

* Those classified as "highly satisfied" responded "completely satisfied" or "satisfied to a considerable extent" to the question on general satisfaction with the program.

TABLE 9 A

Sex and General Satisfaction with the Program

Sex	Post-Questionnaire Respondents: Discussion — Highly Satisfied N	Discussion — Highly Satisfied %	Discussion — Not Highly Satisfied N	Discussion — Not Highly Satisfied %	Lecture — Highly Satisfied N	Lecture — Highly Satisfied %	Lecture — Not Highly Satisfied N	Lecture — Not Highly Satisfied %
Male	37	72.5	14	27.5	34	65.4	18	34.6
Female	63	70.8	26	29.2	51	75.0	17	25.0
Total	100	71.4	40	28.6	85	70.8	35	29.2

TABLE 10 A

Marital Status and General Satisfaction with the Program

Marital Status	Post-Questionnaire Respondents: Discussion — Highly Satisfied N	Discussion — Highly Satisfied %	Discussion — Not Highly Satisfied N	Discussion — Not Highly Satisfied %	Lecture — Highly Satisfied N	Lecture — Highly Satisfied %	Lecture — Not Highly Satisfied N	Lecture — Not Highly Satisfied %
Single	14	73.7	5	26.3	10	62.5	6	37.5
Married	68	71.6	27	28.4	69	70.4	29	29.6
Separated	2	66.7	1	33.3	1	100.0	0	0.0
Divorced	10	66.7	5	33.3	2	100.0	0	0.0
Widowed	5	71.5	2	28.5	3	100.0	0	0.0
Total	99	71.2	40	28.8	85	70.8	35	29.2

TABLE 11 A

Education and General Satisfaction with the Program

Education	Post-Questionnaire Respondents							
	Discussion				Lecture			
	Highly Satisfied		Not Highly Satisfied		Highly Satisfied		Not Highly Satisfied	
	N	%	N	%	N	%	N	%
No College	16	72.8	6	27.2	7	77.8	2	22.2
Some College	29	69.0	13	31.0	32	64.0	18	36.0
College Graduate.	25	65.8	13	34.2	20	80.0	5	20.0
Post Graduate Education	29	80.5	7	19.5	25	71.4	10	28.6
Total	99	71.7	39	28.3	84	70.6	35	29.4

TABLE 12 A

Occupation and General Satisfaction with the Program

Occupation**	Post-Questionnaire Respondents							
	Discussion				Lecture			
	Highly Satisfied		Not Highly Satisfied		Highly Satisfied		Not Highly Satisfied	
	N	%	N	%	N	%	N	%
Professional	43	86.0*	7	14.0	33	68.7	15	31.3
Non-Professional .	22	53.7*	19	46.3	15	68.2	7	31.8
Total	65	71.4	26	28.6	48	68.6	22	31.4

* For discussion groups, the difference between professionals and non-professionals is significant beyond the 0.01 level.

** Excludes women classifying themselves as "housewives".

TABLE 13 A

Religion and General Satisfaction with the Program

Religion	Post-Questionnaire Respondents							
	Discussion				Lecture			
	Highly Satisfied		Not Highly Satisfied		Highly Satisfied		Not Highly Satisfied	
	N	%	N	%	N	%	N	%
Catholic	1	100.0	0	0.0	6	75.0	2	25.0
Protestant	26	86.7	4	13.3	30	79.0	8	21.0
Jewish	46	64.8	25	35.2	28	62.2	17	37.8
Other	7	70.0	3	30.0	2	50.0	2	50.0
None	17	68.0	8	32.0	16	72.7	6	27.3
Total	97	70.8	40	29.2	82	70.1	35	29.9

TABLE 14 A

Participants' Feelings Regarding Changes in the Reading Materials

	Post-Interview Respondents					
	Lecture		Discussion		Total	
	N	%	N	%	N	%
Changes should be made.....	25	41.7	24	50.0	49	45.4
Changes should not be made..	35	58.3	24	50.0	59	54.6
Total	60	100.0	48	100.0	108	100.0

TABLE 15 A

Participants' Feeling Regarding Changes in the Recordings

	Post-Interview Respondents					
	Lecture		Discussion		Total	
	N	%	N	%	N	%
Changes should be made.....	43	68.3	30	63.8	73	66.4
Changes should not be made..	20	31.7	17	36.2	37	33.6
Total	63	100.0	47	100.0	110	100.0

TABLE 16 A

Mean Improvement Scores by Age of Lecture and Discussion Participants

Age	Mean Improvement Score	
	Lecture	Discussion
38 or Younger	1.2	1.4
39 or Older	1.2	1.2

TABLE 17 A

Mean Improvement Scores by Education of Lecture and Discussion Participants

Education	Mean Improvement Score	
	Lecture	Discussion
No College	–0.6	0.6
1 to 3 years of College.....	1.2	1.5
4 or more years of College.....	1.4	1.6

TABLE 18 A

Mean Improvement Scores by Sex of Lecture and Discussion Participants

Sex	Mean Improvement Score	
	Lecture	Discussion
Male	1.1	1.1
Female	0.9	1.5

TABLE 19 A

Mean Improvement Scores by Occupation of Lecture and Discussion Participants

Occupation	Mean Improvement Score	
	Lecture	Discussion
Professional	1.4	1.2
Non-professional	0.3	1.6
Housewife	1.2	1.5

TABLE 20 A

Mean Improvement Scores by Number of Previous Adult Education Courses Taken by Lecture and Discussion Participants

Number of Adult Education Courses Taken Previously	Mean Improvement Scores	
	Lecture	Discussion
None	1.2	1.4
1	1.5	1.8
2 or more	0.8	1.2

TABLE 21 A

The Relationship between Improvement in Test Score and Attitudinal Position at the Beginning of the Series

Attitude	Correlation to Test Score Improvement	
	Lecture	Discussion
Authoritarianism-Equalitarianism	−0.10	−0.11
Ethnocentrism (Patriotism)	−0.15	−0.09
Ethnocentrism (Minorities)	−0.17	−0.13
Democracy	−0.16	−0.11
Tolerance of Ambiguity	−0.11	−0.16

APPENDIX E

The Relative Effectiveness of Small and Large Lecture Classes

Throughout the body of this research report, participants in the large lecture section were combined with those in small lecture classes for purposes of comparison with discussion group members. Such combination assumes that the size of the lecture class had no major influence on the variables employed in the comparative analysis of lecture and discussion methods. To what degree were we justified in making this assumption?

Information gathered via direct observation reveals that some departure from the strictly formal lecture method did occur in the two small lecture classes. The instructors of these two small lecture sections asked questions of class members on the average of 3.3 times per meeting. In addition, for these sections, an average of 9.3 persons per meeting asked questions of the instructors or commented from the floor. Thus, while the small lecture sections were maintained as "teacher-centered" classes, and while prolonged group discussions did not occur, participants in these sections were able to engage to some extent in the conduct of the class. It is, therefore, of interest to compare the members of small lecture classes with participants in discussion groups and the large lecture class in terms of over-all satisfaction with the program. Given the expressed desires of the participants regarding both the opportunity to enter into discussion and the opportunity to hear an organized and authoritative presentation of the topic,[1] the small lecture classes may have approximated the learning situation that was wanted by the participants. If this was the case, the satisfaction of the members of small lecture classes should have been greater than that expressed either by those in discussion groups or the large lecture section.

The data pertaining to the above speculation are summarized in Table 1 B. The percentage of participants stating that they were "completely satisfied" with the Series was significantly larger for the small lecture classes than it was for either the large lecture class or the discussion groups. The difference between the large and the small lecture classes may be attributed

TABLE 1 B

Participants' Ratings of Their General Satisfaction with the Program

Rating of Satisfaction	Per cent Responding		
	Small Lecture	Large Lecture	Discussion
Completely satisfied	37.5	20.6	13.3
Satisfied to a considerable extent	46.9	44.1	57.3
More satisfied than dissatisfied	12.5	23.5	19.3
Neither particularly satisfied nor particularly dissatisfied	0.0	2.9	6.0
Dissatisfied to some degree (3 categories combined)	3.1	8.9	4.0

[1]See Chapter VI.

either to size or to the fact that some "audience" participation took place in the small lecture classes. However, the difference between the small lecture classes and the discussion groups cannot be attributed to group size. In groups of comparable size, participants were more satisfied with a lecture situation that permitted questions and comments from class members than they were with lay-led discussion methods.

Was the above difference in satisfaction reflected in the effects that were measured? In our comparative analysis of effects, was it legitimate to combine the small and the large lecture classes? In terms of improvement in the ability to identify anthropological concepts, no differences were observed between the large and the small lecture sections. The mean improvement score for both types of classes was 1.2.

Small and large lecture classes also were compared in terms of the attitude changes that occurred during the eleven-week period. Table 2 B reports the results of these comparisons. In general, no greater attitudinal change is evidenced by members of small lecture classes than by those in the large lecture class.

Finally, the lecture classes were compared in terms of the numbers of new friendships that were established among the participants. In the small lecture classes, 4.6 per cent developed new friendships with other participants, while the corresponding percentage for members of the large class was 8.3.

On the basis of the above findings, we concluded that the size of the lecture class had no major influence on the type of effects we were investigating. Of course, the greater satisfaction of the members of small classes may have had consequences that we did not observe. For example, as a result of their greater satisfaction, a higher proportion of the small lecture classes may have continued to take adult education courses than was the case for participants in the larger class. However, for the purposes of our research, the assumption that size had no important consequence in terms of the effects measured appears to have been justified. Thus, our combination of all lecture participants for purposes of comparing them to discussion group members seems to be defensible.

TABLE 2 B

Mean Change in Attitudinal Position of the Members of Three Lecture Classes

Attitude	Mean Change in Attitudinal Position		
	Small Lecture Class 1	Small Lecture Class 2	Large Lecture Class
Ethnocentrism (Patriotism)	+0.10	+0.03	−0.14
Ethnocentrism (Minorities)	−0.12	+0.04	−0.03
Tolerance of Ambiguity	−0.30	−0.01	+0.06
Democracy	−0.07	−0.03	−0.12
Attitude toward Adult Education....	−0.15	−0.16	−0.07

APPENDIX F

A Note on the Methods Employed by the Study

Three general methods were employed in the collection of the basic data of the Ways of Mankind Study: the questionnaire, the interview, and direct observation. It is the purpose of this brief appendix to record our general experience with these techniques in the hope that a report of the problems we encountered will be of help to others pursuing research in this area.

In terms of quantity, most of our data were collected through the use of questionnaires. Prior to the administration of the first questionnaire, the participants were given a very brief and straightforward description of the research, and their cooperation was requested. No attempt was made to sell, coerce, or deceive the participants. Both of the questionnaires employed were relatively standard but fairly long instruments. The vast majority of the participants responded cooperatively; however, there were a number who registered considerable irritation. The questionnaires were viewed as an imposition even by some of those who cooperated fully. Our experience suggests that further research utilizing questionnaire methodology probably should be of a more delimited nature than the present investigation. Questionnaires requiring one hour to complete probably will always arouse some resentment.

Interviewing methods, while more expensive than the use of questionnaires, demonstrated a number of advantages in the present research. While there were some participants who expressed reluctance about the prospects of being interviewed, our refusal rate of 2.7 per cent was comparatively low. In general, the rapport established by the interviewers appears to have been excellent, and the reaction of the respondents to the interview was favorable. In practically all instances, the respondents asked questions about the research, its sponsorship, and its purpose. It is our impression that the personal explanation of the research given by the interviewer was more satisfactory from the participant's point of view than was the general explanation given prior to the questionnaire administration. The interviewer was able to answer the particular questions of the interviewees, expand the general explanation where necessary, and give personal assurances of anonymity. Here it should be noted that the interviews took more of the participants' time than did the questionnaires. Nevertheless, the personal nature of the interview situation seemed to be to the liking of our respondents. Further, this was an "easy" population to interview: they were articulate, well informed, and most hospitable.

The particular interview technique employed in the study also deserves some comment. In general, our interviewers were as "non-directive as possible." We were seeking particular information, but we were also looking

for clues and insights. The interview schedule was designed so as to be more structured at the beginning than toward the end. The interviewers experienced little or no difficulty in following this approach in the vast majority of instances. We found that after many of the interviews were "officially" concluded, the respondents continued to converse about the topics discussed. In terms of "clues and insights" that were gained, these "post-mortem" conversations were very rich and often provided an important interpretive foundation for the respondent's earlier statements. Such utilization of the interview situation has certain implications for the conditions under which the interviewer is employed. If this type of interviewing situation is to be achieved, the interviewer cannot be assigned a rigid working schedule; he must clearly understand the purposes of the research; and he must be trained in the art of reconstructing and summarizing lengthy conversations with accuracy. Needless to say, we experienced some variation in the skill of our interviewers, especially in terms of their ability to provide usable records of the most conversational portions of the interview.

For the most part, our use of observers met with considerable success. During the first meetings of the program, the presence of the observers resulted in some uneasiness in 7 of the 12 discussion groups, but in only one instance did the observer's presence have a noticeable effect after the second meeting of the Series. The major shortcomings of this technique as used in the present research resulted from the size of the groups being observed. It was our experience that a lone researcher can attend to and reliably record only a very limited number of variables when he is observing a group having 25 members. Despite the limitations of this technique, we found the observers' summaries and evaluations of the meetings extremely valuable in a number of ways, and we recommend continued utilization of this technique in adult education research.

In terms of participant reaction, then, we encountered our greatest problems in connection with the relatively lengthy questionnaires that were employed. These difficulties probably can be avoided in the future by narrowing the goals of particular research efforts so as to make it possible to keep the time required for the completion of any questionnaire-type instrument at, or below, one-half hour. On the basis of our experience, we would advise the researcher to get his information in the interview situation rather than from a questionnaire, in those instances where the choice is available to him. This is not to say that all questionnaires should be avoided. Certain of the research problems that have been suggested by the present investigation would require the use of questionnaire methods, and in such instances it is obvious that questionnaire techniques must be utilized.

APPENDIX G(1)

WAYS OF MANKIND STUDY

Interview Schedule—Form 1

1. When did you first become interested in the Ways of Mankind Series?
   .....
2. How did you first hear about this series?
   .....
3. a. At the time you decided to take Ways of Mankind, were you considering any other courses or series?
   .....Yes .....No
   b. (IF YES) What other courses were you considering?
   .....
   c. (IF YES) Are you currently taking any of these courses? If so which ones?
   .....
4. a. As you know, the Ways of Mankind Series deals with anthropological material. Would you say that you had much of an interest in anthropology?
   .....Yes .....No
   b. (IF YES) Would you describe that interest for me? (Probe: what is it about anthropology that interests you?)
   .....
   c. (IF YES) About how long have you been interested in anthropology?
   .....
   d. Have you read any books in the field of anthropology?
   .....Yes .....No
   Titles of books read: .....
   .....
5. a. Have you ever had a course in anthropology?
   .....Yes .....No
   b. (IF YES) When was that? .....
   c. (IF YES) What was (were) the title(s) of the course(s)?
   .....
6. What would you say your reasons for enrolling in the Ways of Mankind were? (PROBE: Are there any other reasons? GIVE RESPONDENT TIME TO THINK ABOUT THE QUESTION)
   .....
7. a. Within the last 5 years, have you taken any other adult education courses?
   .....Yes .....No (IF NO, SKIP TO QUESTION 8)
   b. (IF YES) What were these courses? (AFTER RESPONDENT NAMES COURSES) When did you take these?

Courses	*Dates*
.....	.....

   c. (IF YES) What would you say your reasons were for enrolling in *these* courses? (PROBE: Are there any other reasons?)
   .....
   d. (IF YES) What do you feel were the major benefits that you gained from these courses?
   .....
   e. (IF YES) Have the courses you have taken been disappointing to you in any way?
   .....Yes .....No

(IF YES) In what ways have they been disappointing?

.....

8. a. How do you think most people feel about adult education in general? (PROBE: How do you think most people evaluate adult education courses?)

.....

b. How do you feel about this (adult education) personally? (PROBE: How do *you* evaluate adult education courses?)

.....

9. Getting back to the Ways of Mankind Series, are you in one of the discussion groups or one of the lecture groups?

.....Discussion .....Lecture

10. a. At the time you enrolled in the Ways of Mankind, were you aware that both discussion groups and lecture groups were available?

.....Yes .....No

b. (IF YES) What were your reasons for selecting a discussion group (lecture group) rather than a lecture group (discussion group)?

.....

(IF RESPONDENT IS IN A *LECTURE GROUP,* ASK QUESTION 12 BEFORE YOU ASK QUESTION 11. IF RESPONDENT IS IN A DISCUSSION GROUP, ASK QUESTION 11 FIRST.)

11. What do you see as the major advantages of the discussion group method as compared to the lecture method?

.....

12. What do you see as the major advantages of the lecture method as compared to the discussion group method?

.....

13. a. Are any of your friends taking this series with you?

.....Yes .....No

b. (IF YES) How many? .....

c. (IF YES) Did you get together and talk about this before you decided to enroll?

.....Yes .....No

(Comment) .....

.....

d. (IF YES) Do you think you would have taken the series if your friends were not also taking it?

.....Yes .....No

(Comment) .....

.....

14. While we are on the subject of friends, I'd like to ask you a few questions about your community. What do people who live here call this community (neighborhood)?

.....

15. How long have you lived in ..... (community name)?

.....

16. How many good friends of yours are living in ..... (community name)?

.....

17. a. During the past month, how many times have you visited socially in a friend's home for an evening?

.....

b. How many of these visits were with friends living in (community name)?

.....

18. a. During the past month, how many times have friends visited socially in your home for an evening?

.....

b. How many of these visits were from friends in (community name)?

.....

19. a. Are there any important issues facing your community at this time?

.....Yes .....No .....Don't know

b. (IF YES) What are these issues?

.....

c. (IF YES) Is the community taking any action on these issues?

.....Yes .....No .....Don't know

c-1 (IF YES TO c) What action is being taken?

c-2 (IF YES TO c) Have you been involved in any way?

.....Yes .....No

(IF YES to c-2) In what ways have you been involved?

.....

20. a. Do you belong to any *local* civic, social or professional organizations or clubs?

.....Yes .....No

b. (IF YES) To which local organizations or clubs do you belong? (PROBE: Any others?)

.....

c. (FOR EACH ORGANIZATION MENTIONED IN 20-b ASK) Would you tell me about your activities in ..... (name of organization)? (What do you do in .....? How often do you go to meetings?)

Organization	*Activities*
.....	.....

d. Do you hold any offices in any of these organizations?

.....Yes .....No

(IF YES) List offices held.

.....

21. a. Do you belong to any state, regional or national organizations?

.....Yes .....No

b. (IF YES) To which such organizations do you belong. (PROBE: Any others?)

.....

c. (FOR EACH ORGANIZATION MENTIONED IN 20-c ASK) Would you tell me about your activities in ..... (name of organization)? (What do you do in .....? How often do you attend meetings?)

Organization	*Activities*
.....	.....

d. Do you hold any offices in any of these organizations?

.....Yes .....No

(IF YES) List offices held.

.....

22. a. During the past year, have you attended services at a church or synagogue?

.....Yes .....No

b. (IF YES) About how often do you attend?

.....

23. a. Do you read a newspaper regularly?

.....Yes .....No

b. (IF YES) Which newspapers do you read? (PROBE: Do you read any of the local weekly papers?)

.....

c. (IF YES) What sections of the newspaper interest you most?

.....

d. During the past week, about how many hours did you spend reading newspapers?

.....

24. a. Do you read any magazines or journals regularly?

.....Yes .....No

b. (IF YES) Which magazines or journals do you read regularly?

.....

c. During the past week, about how many hours did you spend reading magazines or journals?

.....

25. a. Are you currently reading any books?

.....Yes .....No

b. (IF YES) What are you currently reading?

.....

c. Would you tell me the titles of the last 3 books you read, and about when you read them?

Titles	*When Read*
.....	.....

d. During the past week, about how many hours did you spend reading books?

.....

26. a. Do you own a television set?

.....Yes .....No

b. (IF YES) What television programs do you watch more or less regularly?

.....

c. During the past week, about how many hours did you spend watching television?

.....

27. a. During the past month have you seen any motion pictures?

.....Yes .....No

b. (IF YES) What motion pictures did you see?

.....

28. a. Outside of the things we have already talked about, have you engaged in any other leisure time activities during the past week?

.....Yes .....No

b. (IF YES) What were these activities?

.....

c. (IF YES) Altogether, about how many hours did you spend in these activities during the past week?

.....

29. At those times when you are free to do just what you want, do you usually do something by yourself or do you do something that involves others?

.....

30. When you are in an informal group of 5 or 6 people, in general, do you find that you talk more often, less often, or about the same amount as most other people talk?

.....More often .....About the same .....Less often

(Comment) .....

.....

31. When you are in such a group, do you ever feel reluctant to speak up?

.....Most of the time .....Sometimes .....Rarely .....Never

(Comment) .....
.....

32. a. When you are in an informal group of this kind, how often do you find yourself the center of attention?
.....Most of the time .....Sometimes .....Rarely .....Never
(Comment) .....
.....

b. (IF EVER THE CENTER OF ATTENTION) Do you enjoy being the center of attention?
.....Like very much .....Like somewhat .....Dislike somewhat
.....Dislike very much
(Comment) .....
.....

33. a. When you are in a more or less formal group situation, like a meeting or business conference, how often do you find yourself in a position of leadership?
.....Most of the time .....Sometimes .....Rarely .....Never
(Comment) .....
.....

b. (IF EVER IN A POSITION OF LEADERSHIP) Do you enjoy being a leader?
.....Like very much .....Like somewhat .....Dislike somewhat
.....Dislike very much
(Comment) .....
.....

34. a. Before we finish the interview, I would like to ask a question or two about any future plans you might have regarding adult education. At this time, do you have any plans to take additional adult education courses or series?
....Yes ....No ....Uncertain ....Haven't thought about it, or etc.

b. (IF YES) What courses are you planning to take?
.....

c. (IF NO, UNCERTAIN, OR HAVEN'T THOUGHT ABOUT IT) Are there any adult education courses that seem interesting to you or that you wish were available?
.....Yes .....No .....Can't think of any or don't know
(IF YES) Which courses?
.....

35. Well that finishes the interview. Is there anything you would like to ask me?

APPENDIX G (2)

WAYS OF MANKIND STUDY

For Those Previously Interviewed–Form 2

1. a. At the beginning of the Ways of Mankind Series, how interested were you in anthropology?
   ...Very interested ...Rather interested ...Not particularly interested
   b. Has your interest in anthropology increased or decreased as a result of your participation in the series?
   ....Increased ....Stayed about the same ....Decreased
   c. (If interest has *increased*) Would you say that this increased interest was general or related to specific areas of anthropology? (If specific areas, which ones?)
   ....General ....Specific (Areas of interest)
   .....

2. a. In general, did the series live up to your expectations?
   ....Yes ....Partially ....No
   b. (If "No" skip to 2. d., following page. If "Yes" or "Partially," ask parts b. and c.)
   Can you tell me which of your expectations the series did meet?
   .....
   c. Were there any ways in which the series failed to meet your expectations?
   ....No ....Yes (If "Yes") Which expectations?
   .....
   d. (Ask only if "No" to 2. a) Which of your expectations did the series fail to meet?
   .....
   e. Were there any things you got out of the program which you hadn't expected?
   ....No ....Yes (If "Yes") What?
   .....

3. a. Now I would like to ask you a few more specific questions about the series. First, with regard to the reading materials, how interesting did you find the readings to be?
   ...Very interesting ...Interesting ...Not too interesting ...Boring
   (Comment) .....
   .....
   b. Are there any ways in which you would like to see the readings changed?
   ....No ....Yes (If "Yes") In what ways?
   .....
   c. To what degree did the discussion (lecturer) draw from or build upon the readings?
   ....To a considerable degree ....To some degree ....To a rather limited degree ....Little or not at all
   d. Suppose there were no reading materials connected with the series, how much of an effect would this have had on the program?
   ....Very little effect ....Some effect ....Little or no effect
   What do you think the effect would have been?
   .....

4. a. How about the recordings? How interesting did you find them to be?
   ...Very interesting ...Interesting ...Not too interesting ...Boring
   .....

b. Are there ways in which you feel the recordings might be improved?
....No ....Yes (If "Yes") In what ways?

c. To what degree did the discussion (lecturer) draw from or build upon the recordings?
....To a considerable degree ....To some degree ....To a rather limited degree ....Little or not at all
(Comment) .....
.....

d. Suppose there were no recordings connected with the series, how much of an effect would this have had on the program?
....Very great effect ....Some effect ....Little or no effect
What do you think the effect would have been?
.....

Question 5 *for discussion group participants only*. If lecture participant skip to question 6.

5. a. In your opinion, how effective was the leadership of the group?
....Very effective
....Fairly effective
....Not particularly effective nor particularly ineffective
....Fairly ineffective
....Very ineffective
(Comment) .....
.....

b. Was there anything that you particularly liked about the leadership?
.....

c. Was there anything that you disliked about the leadership?
.....

d. Were you able to participate in the discussion as often as you wanted to?
....Yes, always ....Yes, sometimes ....No
(If "Yes, sometimes" or "No") Why do you suppose this was the case?
.....

e. Did one or a few members tend to dominate the discussion?
....Yes, always ....Yes, sometimes ....No
(If "Yes") When this happened, how did the leader handle it?
.....

f. Aside from the things we have already discussed, how about the general discussion situation? Were there any things that you particularly liked about it?
.....

g. Were there any things about the discussion situation that you disliked?
.....

Question 6 *for lecture participants only*. If discussion group participant, skip to question 7.

6. a. In your opinion, how effective was the lecturer?
....Very effective
....Fairly effective
....Not particularly effective nor particularly ineffective
....Fairly ineffective
....Very ineffective

(Comment) .....
.....

b. Was there anything that you particularly liked about the lecturer?
.....

c. Was there anything you disliked about the lecturer?
.....

d. How would you evaluate the lecturer in terms of the way in which he organized and presented his material?
....Excellent ....Good ....Fair ....Poor ....Very Poor
(Comment) .....
.....

e. Did it ever seem to you that the lecturer was not well prepared?
....Yes ....No
(If "Yes") How often did this seem to be the case?
....Very often ....Rather often ....Rarely ....Only once
(Comment) .....
.....

f. Aside from the things we have already discussed, how about the general lecture situation? Were there any things that you particularly liked about it?
.....

g. Were there any things about the lecture situation that you disliked?
.....

* * * * * * * * *

If respondent is in a *Lecture Group,* ask question 8 before you ask question 7. If respondent is in a discussion group, ask question 7 first.

* * * * * * * * *

7. What do you see as the major advantages of the discussion group method as compared to the lecture method?
.....

8. What do you see as the major advantages of the lecture method as compared to the discussion group method?
.....

9. a. Have you taken any adult education courses other than the Ways of Mankind?
....Yes ....No
b. (If "Yes") How would you compare the Ways of Mankind series to these other courses? (Liked better, not as well, etc. Why?)
.....

10. a. Do you now plan to take additional adult education courses?
...Yes, definitely ...Yes, probably ...No, probably ...No, definitely
b. (If "Yes") What type of courses would be of greatest interest to you?
.....
c. Has participation in the Ways of Mankind series changed your opinion about adult education courses in general?
....Yes, a great deal ....Yes, somewhat ....Yes, a little ....No
(Comment) .....
.....
(If "Yes") In what way has your opinion changed?
.....

11. a. Have you made any new friends as a result of your participation in the series?
....Yes ....No

(Comment) .....
.....
(If "No", skip to 11. e.)

b. (If "Yes" to 11. a.) How many friends have you made? .....

c. (If "Yes" to 11. a.) Do you see these friends at times other than when the group meets?
....Yes ....No
(Comment) .....
.....

d. (If "Yes" to 11. a.) How many of these friends live in your community?
.....

e. Has participation in the series had any (other) effect on your social life? (Probe: Have you become involved in any new groups or organizations?)
....Yes ....No
(If Yes) Would you describe these effects for me?
.....

12. a. How about your reading interests? As a result of your participation in the series, have you read any books that you might not have read otherwise?
....Yes ....No
(If "Yes") Can you tell me the titles of those books?
.....

b. How about magazines? Has there been any change in the things you read in magazines?
....Yes ....No
(If "Yes") Would you describe these changes for me?
.....

c. How about the sections of the newspaper? Have you noticed any change in those sections of the newspaper which interest you?
....Yes ....No
(If "Yes") Would you describe these changes for me?
.....

d. Have you noticed any change in what you get out of the things you read? (Probe: Do you look for different things than you did before you took the series?)
....Yes ....No
(If "Yes") Would you describe these changes for me?
.....

e. How about television? Have you noticed any change in the programs you watch on television?
....Yes ....No
(If "Yes") Would you describe these changes for me?
.....

f. How about movies? Has there been a motion picture that you have gone to see because of your participation in the series?
....Yes ....No
(If "Yes") Would you tell me the title(s) of the picture(s)?
.....

13. At this point, I would like to ask you a few questions about how you feel when you are in an informal group. (Other than discussion group.)

a. When you are in an informal group of 5 or 6 people, in general, do you find that you talk more often, less often, or about the same amount as most other people talk?
....More often ....About the same ....Less often

(Comment) .....
.....

b. When you are in such a group, do you ever feel reluctant to speak up?
....Most of the time ....Sometimes ....Rarely ....Never
(Comment) .....
.....

c. When you are in an informal group of this kind, how often do you find yourself the center of attention?
....Most of the time ....Sometimes ....Rarely ....Never
(Comment) .....
.....

d. (If ever the center of attention) Do you enjoy being the center of attention?
....Like very much ....Like somewhat ....Dislike somewhat
....Dislike very much
(Comment) .....
.....

e. When you are in a more or less formal group situation, like a meeting or business conference, how often do you find yourself in a position of leadership?
....Most of the time ....Sometimes ....Rarely ....Never
(Comment) .....
.....
(If ever in a position of leadership) Do you enjoy being a leader?
....Like very much ....Like somewhat ....Dislike somewhat
....Dislike very much
(Comment) .....
.....

14. a. Getting back to the series, do you think that your participation has changed the way you look at things such as our society, world affairs, and so on?
....Yes, definitely ....Yes, probably ....No
(If "Yes") Would you describe these changes for me?
.....

b. More specifically, do you feel your participation in the series has changed the way you think about other people? (Probe: How about people who are very different from yourself?)
....Yes, definitely ....Yes, probably ....No
(If "Yes") Would you describe these changes?
.....

c. How about the way you think about yourself? Has your participation changed the way you feel or think about your own behavior? (Note: Be especially careful to get any feelings of being disturbed about the material in relation to self.)
....Yes, definitely ....Yes, probably ....No
(If "Yes") Please describe these changes.

15. We have covered a number of things. Have we overlooked anything important regarding how you feel about the series? Do you have any comments or criticisms that might be helpful?
.....

Note: The post-interview with those *not* previously interviewed followed the above schedule, with the addition of several items from the first schedule.

APPENDIX G(3)

FIRST QUESTIONNAIRE–DISCUSSION GROUPS–Part I

1. a. Have you participated in any adult education program within the previous three years?
   ....No
   ....Yes
   b. If *yes,* please list the titles of the courses or series you have taken within the last three years.
   .....
2. What are your *major* reasons for enrolling in adult education courses?
   .....
3. a. Are you currently taking any course or series in addition to the Ways of Mankind Series?
   ....No
   ....Yes
   b. If *yes,* what additional courses or series are you now taking?
   .....
4. a. How did you first learn of the Ways of Mankind Series?
   .....
   b. Did you seek any additional information about the series?
   ....No
   ....Yes
   c. If *yes,* where did you seek such information?
   .....
5. What are your *major* reasons for enrolling in the Ways of Mankind Series?
   .....
6. a. Do you have friends or acquaintances who are *now* taking the Ways of Mankind Series?
   ....No
   ....Yes
   b. If *yes,* about how many? .....
   c. Of these, how many are in the same group you are in? .....
7. As you know, the Ways of Mankind Series is being offered both as a lecture series and as a discussion group series. Why did you choose the discussion (lecture) series in preference to the lecture (discussion) series?
   .....
8. If all the discussion (lecture) groups had been full, would you have been willing to participate in a lecture (discussion) group devoted to the Ways of Mankind materials?
   ....I would have been *very willing* to participate in a lecture (discussion) group.
   ....I would have been *rather willing* to participate in a lecture (discussion) group.
   ....I would have been *rather unwilling* to participate in a lecture (discussion) group.
   ....I would have been *very unwilling* to participate in a lecture (discussion) group.
9. a. In the past, have you ever participated in an organized discussion group devoted to a particular topic (e.g. like the Ways of Mankind)?
   ....No
   ....Yes
   b. If *yes,* how many of these groups have you been in? .....

10. If you have participated in discussion groups before, in general, how valuable have these groups been for you personally?
    ....Extremely valuable
    ....Valuable
    ....Not particularly valuable
    ....Not at all valuable.
11. a. If you have participated in discussion groups before, what did you like best about such experiences?
    .....
    b. What did you like least?
    .....
12. The following is a list of things that people sometimes expect to gain through participation in a program like the Ways of Mankind Series. Please check how important *each of* these expectations was for you in deciding to take this series.

	Very Important	*Rather Important*	*Not too Important*	*Unimportant*
a. Increase my knowledge about the subject	....	....	....	....
b. Increase my knowledge in general	....	....	....	....
c. Increase my ability to converse on this subject	....	....	....	....
d. Increase my ability to converse in general	....	....	....	....
e. Increase my ability to understand other people	....	....	....	....
f. Increase my ability to understand myself	....	....	....	....
g. Increase my ability to work with others	....	....	....	....
h. Increase my ability to think logically	....	....	....	....
i. Increase my ability to organize my thoughts quickly	....	....	....	....
j. Provide me with an opportunity to make interesting friends	....	....	....	....
k. Provide me with an opportunity to fill a gap in my education	....	....	....	....
l. Provide me with an opportunity to get out of an "intellectual rut"	....	....	....	....

13. a. Did you have other expectations (not listed in quesetion 12) regarding this series?
    ....No
    ....Yes
    b. If *yes,* what were these expectations?
    .....

PART II

The following section has to do with what people think about a number of social questions. The best answer to each statement below is *your personal opinion*. We have tried to cover many different points of view. You may find yourself agreeing strongly with some statements, disagreeing just as strongly with

others, and perhaps uncertain about still others. Whether you agree or disagree with any statement, you can be sure that many people feel the same way you do.

Mark each statement in the left margin according to how much you agree or disagree with it. ***Please mark every one.*** Write in +3, +2, +1, 0, −1, −2 or −3, depending on how you feel in each case.

+3: I agree very much
+2: I agree pretty much
+1: I agree a little
0: I neither agree nor disagree
−1: I disagree a little
−2: I disagree pretty much
−3: I disagree very much

.... 1. Discipline should be the responsibility of the leader of a group.
.... 2. In my opinion, the adult education courses that now exist are extremely important.
.... 3. The main threat to basic American institutions during this century has come from the infiltration of foreign ideas, doctrines, and agitators.
.... 4. Sometimes one can be too open-minded about the possible solutions to a problem that faces a group.
.... 5. Even though most adult education courses are of little practical value, a few do provide worthwhile experiences.
.... 6. Almost any job that can be done by a committee can be done better by having one individual responsible for it.
.... 7. For me, most adult education courses hold little interest.
.... 8. If the United States is to maintain its present position, Americans must continue to be committed to basic American beliefs.
.... 9. People who seem unsure and uncertain about things make me feel uncomfortable.
....10. Human nature being what it is, there must always be war and conflict.
....11. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
....12. There will always be superior and inferior nations in the world and, in the interests of all concerned, it is best that the superior ones be in control of world affairs.
....13. People can be trusted.
....14. I don't like things to be uncertain and unpredictable.
....15. Most people who don't get ahead just don't have enough will power.
....16. In case of disagreement within a group the judgment of the leader should be final.
....17. Straightforward reasoning appeals to me more than metaphors and the search for analogies.
....18. Most adult education courses are very worthwhile.
....19. Modern technology certainly demonstrates the intellectual superiority of Americans as compared to people living in primitive societies.
....20. A few strong leaders could make this country better than all the laws and talk.
....21. Generally there comes a time when democratic group methods must be abandoned in order to solve practical problems.
....22. I don't like modern art.
....23. In view of the present national situation, it is highly important to limit responsible government jobs to native, white, Christian Americans.
....24. Adult education programs given in this country should be discontinued.
....25. The knowledge one gains in adult education courses is no greater than that gained by simply reading the newspaper.

....26. Our thinking would be a lot better off if we would forget about words like "probably," "approximately" and "perhaps."
....27. My opinions about adult education are neither very pro nor very con.
....28. The most important thing a child should learn is obedience to his parents.
....29. "Reality" is different for people who speak non-European languages than it is for Americans and Europeans.
....30. Some system of authority is needed to prevent people from breaking a society's laws.
....31. Even in the most democratic society, the individual cannot be allowed to have absolute freedom to choose his own conduct.
....32. Sometimes it is necessary to ignore the views of a few people in order to reach a decision in a group.
....33. I often wish people would be more definite about things.
....34. I would certainly advise my friends to participate in adult education courses.
....35. The most vicious, irresponsible, and racketeering unions are, in most cases, those having largely foreigners for leaders.
....36. It is sometimes necessary to use autocratic methods to obtain democratic objectives.
....37. Women should stay out of politics.
....38. There will always be wars because, for one thing, there will always be races who ruthlessly try to grab more than their share.
....39. Perfect balance is the essence of all good composition.
....40. Certain religious sects whose beliefs do not permit them to salute the flag should be forced to conform to such patriotic action, or else be abolished.
....41. There is some doubt in my mind as to the value of most adult education courses.
....42. The many political parties tend to confuse national issues, add to the expense of elections, and raise unnecessary agitation. For this and other reasons, it would be best if all political parties except the two major ones were abolished.
....43. It is natural for an American to feel that the United States is the world's greatest nation.
....44. "Inventive genius" seems to be a characteristic that is pretty well limited to modern industrial societies.
....45. I feel that learning the material used in adult education courses is not usually worth the effort.
....46. Usually it is not feasible for all members of a group to take an equal interest and share in the activities of the group.
....47. We are spending too much money for the pampering of criminals and the insane, and for the education of inherently incapable people.
....48. European refugees may be in need, but it would be a big mistake to lower our immigration quotas and allow them to flood the country.
....49. Any group or social movement which contains many foreigners should be watched with suspicion and, whenever possible, be investigated by the FBI.
....50. In a group that really wants to get something done, the leader should exercise friendly but firm authority.
....51. One main difficulty with allowing the entire population to participate fully in government affairs (voting, jobs, etc.) is that such a large percentage is innately deficient and incapable.

....52. Most of the facts presented in an adult education course seem "watered-down."
....53. A large-scale system of sterilization would be one good way of breeding out criminals and other undesirable elements in our society and so raise its general standards and living conditions.
....54. Evaluating people differently, that is seeing some people as better than others, is certainly not a universal condition of social living.
....55. People sometimes say that an insult to your honor should not be forgotten.
....56. In most practical situations, the more experienced members of a group should assume responsibility for the group discussion.
....57. If a society is to continue to function, its members must conform to certain rules of behavior.
....58. There are a number of adult education courses which seem pretty well suited to a person with my educational background.
....59. Because of the way American children are raised, it is rather natural for them to be competitive.
....60. Patriotism and loyalty are the first and most important requirements of a good citizen.

PART III

Below are a set of technical definitions (left hand column) and a set of concepts (right hand column). Of course, no one is expected to know all of these definitions at the beginning of the series. However, we would like to determine how familiar the participants are with certain technical concepts of anthropology. Consider each definition. Then from the set of concepts, select the one which you think best fits the definition. Place the letter corresponding to that concept in the blank in front of the definition. You may use a concept more than once.

Definitions	Concepts
.... 1. That complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society.	A. Government B. Society C. Status
.... 2. The process of growing into a culture, learning its technical knowledge, its patterns of behavior, and its attitudes and viewpoints.	D. Group E. Achieved Status F. Culture
.... 3. A physical thing or event whose function is to indicate some other thing or event.	G. Symbol H. Ethics
.... 4. The unique set of solutions to biological and social needs which are learned and shared by the members of a society and which link the many diverse elements of living into a way of life.	I. Ascribed Status J. Prestige K. Enculturation
.... 5. The social evaluation of a socially defined position.	L. Ethnocentrism
.... 6. A social position occupied by an individual as a result of circumstances over which he has little or no control.	M. Sign N. Prejudice
.... 7. The appropriate modes of behavior, proper conduct, and attitudes which are associated with a socially defined position.	O. Role P. Technology Q. Communication

.... 8. The accumulated knowledge and methods by which man copes with his environment.
.... 9. The feeling that one's own group is superior to other groups.
....10. A number of people organized as a unit and sharing a common cultural heritage.

R. Family
S. Totem
T. Language
U. Custom

PART IV

General Background Information.

1. Sex:
   ....Female
   ....Male
2. a. Formal education:
      ....Grammar school or less
      ....Some high school
      ....High School graduate
      ....Some college
      ....College graduate
      ....Graduate work
   b. If you attended a college or university, what degrees and/or certificates do you have?
      .....
3. Marital status:
   ....Single
   ....Married
   ....Separated
   ....Divorced
   ....Widowed
4. a. What is your usual occupation? .....
      .....
   b. If you are a *housewife,* what does your husband do? .....
      .....
   c. If you are *retired,* what was your usual occupation? .....
      .....
5. What is your date of birth? .....
   Month Day Year
6. Religious preference:
   ....Catholic
   ....Jewish
   ....Protestant
   ....Other, please specify .....
   ....None
7. Name: .....

APPENDIX G(4)

SECOND QUESTIONNAIRE–DISCUSSION GROUPS–Part I

1. To what degree are you satisfied with the Ways of Mankind Series in general?
   1. ....Completely satisfied
   2. ....Satisfied to a considerable extent
   3. ....More satisfied than dissatisfied
   4. ....Neither particularly satisfied nor particularly dissatisfied
   5. ....More dissatisfied than satisfied
   6. ....Dissatisfied to a considerable extent
   7. ....Completely dissatisfied
2. What have you liked *most* about the series? .....
   .....
3. What have you liked *least* about the series? .....
   .....
4. Do you plan to take other Liberal Arts Series (e.g. World Politics, Looking at Modern Painting, Introduction to the Humanities, etc.)?
   1. ....I definitely will take other Liberal Arts Series.
   2. ....I probably will take other Liberal Arts Series.
   3. ....I probably will not take other Liberal Arts Series.
   4. ....I definitely will not take other Liberal Arts Series.
5. Just assuming you were to take another Liberal Arts Series, would you prefer to be in a lecture or a discussion group?
   1. ....I definitely would prefer a lecture group.
   2. ....I probably would prefer a lecture group.
   3. ....I really have no preference.
   4. ....I probably would prefer a discussion group.
   5. ....I definitely would prefer a discussion group.
6. How would you rate the amount of agreement on most of the ideas and issues discussed in your group? (Omitted in lecture questionnaire)
   1. ....Almost all of the members have pretty much the same views.
   2. ....Most of the members have similar views, but there are a few who differ greatly in their points of view.
   3. ....A few of the members have similar views, but most differ greatly in their points of view.
   4. ....Almost all of the members differ greatly in their points of view.
7. How would you rate your group (class) in terms of the members' interest in the program?
   1. ....Almost all seem very interested.
   2. ....Most seem very interested.
   3. ....About half seem very interested.
   4. ....Less than half seem very interested.
8. How frequently did your group's discussion (the lecture) seem somewhat trivial? (For lectures, an added question: How frequently did the lecture seem too technical?)
   1. ....Frequently.
   2. ....Occasionally.
   3. ....Rarely.
   4. ....Never.
9. As background for the discussions (lectures), how important were the reading materials?
   1. ....Very important.

2. ....Rather important.
3. ....Not too important.
4. ....Unimportant.

10. On the average, how many hours per week did you spend preparing for the discussions (e.g. reading the materials)?
    ..... hours.
11. As background for the discussions (lectures), how important were the recordings?
    1. ....Very important.
    2. ....Rather important.
    3. ....Not too important.
    4. ....Unimportant.
12. In your opinion, how effective was the leadership of the group (the lecturer)?
    1. ....Very effective.
    2. ....Fairly effective.
    3. ....Not too effective.
    4. ....Ineffective.
13. a. How many of the members of your group (excluding your spouse) do you see socially outside of the group discussions?
    .....
    b. Of those you do see socially, how many are *new* friends that you have met because of your participation in the series?
    .....
14. How do you feel about the size of your group (class)?
    1. ....The group was much too large.
    2. ....The group was a little too large.
    3. ....The group was about the right size.
    4. ....The group was a little too small.
    5. ....The group was much too small.
15. How do you feel about the length of the series (eleven sessions)?
    1. ....The series should be much longer.
    2. ....The series should be a little longer.
    3. ....The series is about the right length.
    4. ....The series should be a little shorter.
    5. ....The series should be much shorter.
16. How often have you been able to attend the discussions (lectures)?
    1. ....I have attended all the meetings.
    2. ....I have attended almost all of the meetings.
    3. ....I have attended about half of the meetings.
    4. ....I have attended less than half of the meetings.
17. The following is a list of things that people sometimes expect to gain through participation in a program like the Ways of Mankind Series. How much effect do you feel your participation in this series has had in each of the following areas?

	Considerable Effect	Some Effect	Little or No Effect
a. Increased my knowledge about the subject	1.	2.	3. ....
b. Increased my knowledge in general	1.	2.	3. ....
c. Increased my ability to converse on this subject	1.	2.	3. ....
d. Increased my ability to converse in general	1.	2.	3. ....

e. Increased my ability to understand other people	1.	2.	3. ....
f. Increased my ability to understand myself	1.	2.	3. ....
g. Increased my ability to work with others	1.	2.	3. ....
h. Increased my ability to organize my thoughts quickly	1.	2.	3. ....
i. Increased my ability to think logically	1.	2.	3. ....
j. Filled a gap in my education	1.	2.	3. ....
k. Helped me to get out of an "intellectual rut"	1.	2.	3. ....

18. Do you feel that your participation has had any other important effects?
    1. ....No
    2. ....Yes

    If yes, would you describe these effects? .....
    .....

PART II

The following section has to do with what people think about a number of questions. The best answer to each statement below is *your personal opinion.* We have tried to cover many different points of view. You may find yourself agreeing strongly with some statements, disagreeing just as strongly with others, and perhaps uncertain about still others.

Mark each statement in the left margin according to how much you agree or disagree with it. *Please mark every one.* Write in +3, +2, +1, 0, −1, −2, −3, depending on how you feel in each case.

+3: I agree very much.
+2: I agree pretty much.
+1: I agree a little.
0: I neither agree nor disagree.
−1: I disagree a little.
−2: I disagree pretty much.
−3: I disagree very much.

.... 1. Most adult education courses seem to "wander around" a little more than they should.
.... 2. I don't like things to be uncertain and unpredictable.
.... 3. Almost any job that can be done by a committee can be done better by having one individual responsible for it.
.... 4. The main threat to basic American institutions during this century has come from the infiltration of foreign ideas, doctrines, and agitators.
.... 5. People who seem unsure and uncertain about things make me feel uncomfortable.
.... 6. My opinions about adult education are neither very pro nor very con.
.... 7. The many political parties tend to confuse national issues, add to the expense of elections, and raise unnecessary agitation. For this and other reasons, it would be best if all political parties except the two major ones were abolished.
.... 8. Sometimes one can be too open-minded about the possible solutions to a problem that faces a group.
.... 9. In my opinion, the adult education courses that now exist are extremely important.
....10. Discipline should be the responsibility of the leader of a group.
....11. A large-scale system of sterilization would be one good way of breeding out criminals and other undesirable elements in our society and so raise its general standards and living conditions.

....12. In most practical situations, the more experienced members of a group should assume responsibility for the group discussion.
....13. One main difficulty with allowing the entire population to participate fully in government affairs (voting, jobs, etc.) is that such a large percentage is innately deficient and incapable.
....14. In a group that really wants to get something done, the leader should exercise friendly but firm authority.
....15. The most vicious, irresponsible, and racketeering unions are, in most cases, those having largely foreigners for leaders.
....16. It is sometimes necessary to use autocratic methods to obtain democratic objectives.
....17. I often wish people would be more definite about things.
....18. Sometimes it is necessary to ignore the views of a few people in order to reach a decision in a group.
....19. Our thinking would be a lot better off if we would just forget about words like "probably," "approximately" and "perhaps."
....20. In view of the present national emergency, it is highly important to limit responsible government jobs to native, white, Christian Americans.
....21. I don't like modern art.
....22. Generally there comes a time when democratic group methods must be abandoned in order to solve practical problems.
....23. Straightforward reasoning appeals to me more than metaphors and the search for analogies.
....24. Even though most adult education courses are of little practical value, a few do provide worthwhile experiences.
....25. Certain religious sects whose beliefs do not permit them to salute the flag should be forced to conform to such patriotic action, or else be abolished.
....26. Although some of the criticisms of adult education courses are correct, participating in such courses has been beneficial for me.
....27. Perfect balance is the essence of all good composition.
....28. There will always be wars because, for one thing, there will always be races who ruthlessly try to grab more than their share.
....29. Most adult education courses are very worthwhile.
....30. Patriotism and loyalty are the first and most important requirements of a good citizen.
....31. I would certainly advise my friends to participate in adult education courses.
....32. Any group or social movement which contains many foreigners should be watched with suspicion and, whenever possible, be investigated by the FBI.
....33. Usually it is not feasible for all members of a group to take an equal interest and share in the activities of the group.
....34. We are spending too much money for the pampering of criminals and the insane, and for the education of inherently incapable people.
....35. I feel that learning the material used in adult education courses is not usually worth the effort.
....36. In case of disagreement within the group, the judgment of the leader should be final.
....37. European refugees may be in need, but it would be a big mistake to increase our immigration quotas and allow them to flood the country.
....38. Most of the facts presented in an adult education course seem "watered-down."

....39. There will always be superior and inferior nations in the world and, in the interest of all concerned, it is best that the superior ones be in control of world affairs.
....40. I don't like to undertake any project unless I have a pretty good idea as to how it will turn out.
....41. For me, most adult education courses hold little interest.

PART III

Below are a set of technical definitions (left hand column) and a set of concepts (right hand column). We would like to determine how familiar participants become with certain technical concepts of anthropology. Consider each definition. Then from the set of concepts, select the one which you think best fits the definition. Place the letter corresponding to that concept in the blank in front of the definition. *You may use a concept more than once.*

Definitions	Concepts
.... 1. The feeling that one's own group is superior to other groups.	A. Language
.... 2. A cultural idea which reflects the habitual ways of action of members of a society, validates these ways to the members, and to an extent controls and modifies these ways.	B. Clan
.... 3. The appropriate modes of behavior, proper conduct, and attitudes which are associated with a socially defined position.	C. Prejudice
.... 4. The unique set of ways of acting, feeling and thinking channeled by a society from the infinite number and variety of potential ways of living.	D. Value
.... 5. The social evaluation of a socially defined position.	E. Ethics
.... 6. The accumulated knowledge and methods by which man copes with his environment.	F. Arete
.... 7. The unique set of solutions to biological and social needs which are learned and shared by the members of a society and which link the many diverse elements of living into a way of life.	G. Society
.... 8. Any number of people who share a common interest and feel themselves to be a unit for some particular purpose.	H. Prestige
.... 9. A physical thing or event whose function is to indicate some other thing or event.	I. Culture
....10. A social position occupied by an individual as a result of his own personal accomplishments.	J. Group
....11. Those qualities of person, position, and circumstance used within a culture to distinguish a person of honor.	K. Ascribed Status
....12. A thing which has value or meaning bestowed upon it by those who use it.	L. Ethnocentrism
	M. Symbol
	N. Sign
	O. Role
	P. Achieved Status
	Q. Family
	R. Totem
	S. Technology
	T. Status